

## HIGHWAY WORK PROPOSAL

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

Proposal Number:

Ø 1

COUNTY	STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	HIGHWAY
Sauk	1674-00-80	WISC 2014 432	Lake Delton – Sauk City Road Terrytown Rd to Ski Hi Rd, Phase 1	USH 12
Sauk	1674-00-85		Lake Delton – Sauk City Road Terrytown Rd to Ski Hi Rd, Phase 1	USH12

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, \$ 680,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due  Date: December 9, 2014 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code
Contract Completion Time  September 30, 2016	<b>SAMPLE NOT FOR BIDDING PURPOSES</b>
Assigned Disadvantaged Business Enterprise Goal  6 %	This contract is 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 Grading, base aggregate dense, storm sewer, concrete pavement, HMA pavement, concrete curb and gutter, concrete sidewalk, permanent signing, pavement marking, street lighting, box culverts C-56-2029 and C-56-2032, bridges B-56-205, 206, 209, 210 and 213, sign structures S-56-25, 26, 27 and 28 and retaining walls R-56-33, 35 and 36.	Notice of Award Dated	Date Guaranty Returned
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**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.

## 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://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm>. 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](http://www.bidx.com) web site or by contacting:

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

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at <http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm> 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.

#### B Submitting Electronic Bids

##### B.1 On the Internet

- (1) Do the following before submitting the bid:
  1. Have a properly executed annual bid bond on file with the department.
  2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in **102.6** and **102.9** of the standard specifications, submit the proposal on the internet as follows:

1. Download the latest schedule of items reflecting all addenda from the Bid Express™ web site.
  2. Use Expedite™ software to enter a unit price for every item in the schedule of items.
  3. Submit the bid according to the requirements of Expedite™ software and the Bid Express™ web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid.
  4. Submit the bid before the hour and date the Notice to Contractors designates.
  5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.
- (3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

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

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

**Bidder Name**

**BN00**

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

- (3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.
- (4) The bidder-submitted printout of the Expedite™ generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.
- (5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:
  1. The check code printed on the bottom of the printout of the Expedite™ generated schedule of items is not the same on each page.
  2. The check code printed on the printout of the Expedite™ generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.

3. The diskette or CD ROM is not submitted at the time and place the department designates.

### **C Waiver of Electronic Submittal**

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





# PROPOSAL BID BOND

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.

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## **SPECIAL PROVISIONS**

### **1. General.**

Perform the work under this construction contract for Project 1674-00-80 and 1674-00-85, Lake Delton – Sauk City Road, Terrytown Road to Ski Hi Road, Phase 1, USH 12, Sauk 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 (20140630)

### **2. Scope of Work.**

The work under this contract shall consist of grading, base aggregate dense, storm sewer, concrete pavement, HMA pavement, concrete curb and gutter, concrete sidewalk, permanent signing, pavement marking, street lighting, box culverts C-56-2029 and C-56-2032, bridges B-56-205, 206, 209, 210 and 213, sign Structures S-56-25, 26, 27 and 28, retaining walls R-56-33, 35 and 36 and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

### **3. Prosecution and Progress.**

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

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

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

Hold progress meetings once a week. The contractor's superintendent or designated representative and subcontractor's representatives for ongoing subcontract work or subcontractor work to begin within the next two weeks are to attend and provide a written schedule of the next week(s) operations. Include begin and end dates of specific prime and

subcontractor work operations. Invite City of Baraboo, Village of West Baraboo, Town of Baraboo and Sauk County representatives to attend the progress meetings. Agenda items to include review of contractor's schedule and subcontractor's schedule, evaluation of progress and pay items, and revisions if necessary. Plans and specifications for upcoming work will be reviewed to prevent potential problems of conflicts between contractors.

Any work instream or immediately upon the streambanks of Skillet Creek that could adversely affect stream bottom or water quality shall occur between June 1 and September 15 to avoid fish spawning periods and ensure germination of vegetation before frost.

Conform to the following measures in order to avoid disturbance of active bird nests on the project:

- Remove trees and shrubs from the Baraboo River (Station 381) to the end of the project between August 30 and May 1.
- In fields that are not in row crops, lawn turf or urban use areas, avoid disturbance between May 1 and August 30 unless the areas are mowed or the vegetation layer is removed in a manner acceptable to the engineer. Coordinate and confirm locations of these areas with the engineer and Andy Barta with WDNR (608) 275-3308.

Complete Channel 1, 2 and 3 realignments in 2015 between January 1 and April 30 and/or between September 1 and December 31.

Complete Structure C-56-2029 and grading from C-56-2029 to the end of the project in 2015 to allow for settlement before paving is completed under Project 1674-00-81.

Work on Project 1674-00-82 will require that access to the Baraboo River (B-56-207 and 208, Station 378), Skillet Creek (B-56-211 and 212, Station 456) and Skillet Creek Tributary (B-56-214 and 215, Station 517) structure sites be completed by the contractor of this contract. Coordination of this work with the contractor for Project 1674-00-82 is required and is part of this project. More information on that project is contained in the Other Contracts section of these special provisions.

- Anticipated items of completion required for providing access to the Baraboo River structures include: substantial completion of grading from the beginning of the project (Station 321+57) to the Baraboo River structures and from the Baraboo River structures to approximately Station 404 (or as required by the contractor on Project 1674-00-82) and Structures B-56-205 and 206. Included in this is grading for the temporary beam truck turnaround as shown in the plans. Do not begin work on CTH W, Structures B-56-209 and 210, or the USH 12 mainline grading from approximately Station 404 to the CTH W structures until the contractor for Project 1674-00-82 has made all needed equipment and material deliveries to the Baraboo River structures site.

- Anticipated items of completion required for providing access to the Skillet Creek structures include: substantial completion of grading from approximately Station 433 to the Skillet Creek structures. Do not begin work on CTH W, Structures B-56-209 and 210, or the USH 12 mainline grading from the CTH W structures to approximately Station 433 until the contractor for Project 1674-00-82 has made all needed equipment and material deliveries to the Baraboo River structures site.
- Anticipated items of completion required for providing access to the Skillet Creek Tributary structures include: substantial completion of grading from approximately Station 433 to the Skillet Creek Tributary structures and Structure C-56-2029. Do not begin work on CTH W, Structures B-56-209 and 210, or the USH 12 mainline grading from the CTH W Structures (B-56-209 and 210) to approximately Station 433 until the contractor for Project 1674-00-82 had made all needed equipment and material deliveries to the Skillet Creek Tributary structures site.

Notify the City of Baraboo Police and Fire Departments, Baraboo District Ambulance Service, Sauk County Sheriff and Wisconsin State Patrol at least 3 days (72 hours) in advance of all traffic switches and closures of existing roads.

Notify business owners and residents at least 2 days (48 hours) prior to restricting access and 3 days (72 hours) prior to closing access.

The existing Village of West Baraboo water main serves users along the existing STH 136 corridor. This watermain is to remain in service until the new water main is installed, tested and accepted. After acceptance, the existing watermain can be abandoned and removed and the associated water valves and fire hydrants can be removed.

Notification of water service interruption is required. Notify the Village of West Baraboo Department of Public works and all affected water users 48 hours in advance of service interruptions.

The existing Village of West Baraboo sanitary sewer main serves users along the existing STH 136 corridor. These facilities are to remain in service at all times. Removal of existing sanitary sewer pipe and manholes will be performed concurrently with the installation of the new sanitary sewer main. Bypass pumping will be required between manhole 126 and existing manhole 125.

STH 136 may be closed for a maximum of 80 calendar days. Do not reopen STH 136 until completing the following work: HMA and concrete pavement, concrete curb and gutter, lighting, signing and pavement marking.

If the contractor fails to complete the contract work necessary to reopen STH 136 within 80 calendar days, the department will assess the contractor \$1690 in interim liquidated damages for each calendar day that the road remains closed. An entire calendar day will be

charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

The department will not grant time extensions for the following:

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

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

#### **4. Traffic.**

Keep USH 12 open to through traffic at all times for the duration of this project. The stream realignment work south of Ski Hi Road may require intermittent shoulder closures on USH 12.

Close STH 136 and CTH W and detour traffic as shown in the plans.

Close Hatchery Road, Gasser Road and Cowles Road with no posted detour.

Do not close STH 136 and CTH W concurrently.

Do not close Cowles Road or Gasser Road while CTH W is closed.

Maintain access to properties along STH 136, Hatchery Road, CTH W, Commerce Court, Gasser Road and Cowles Road for local residents, businesses, and emergency vehicles. Maintain and keep open the access to all driveways and parking lots where alternative access is not available at all times by closing one driveway at a time, building half the driveway at a time and/or placing concrete work. Placing of concrete work, as directed by the engineer, is included in the item that is being placed.

Maintain access through the construction zone on STH 136 for Croell Concrete at all times. Maintain a 10' wide driving surface in order to accommodate Croell Concrete mixing trucks. The contractor will be allowed to close STH 136 for periods of time up to 48 hours up to once per month for construction operations required to complete the contract work. The contractor shall contact Croell Concrete in person 72 hours in advance of the scheduled closure for coordination of their delivery operations. The contact person for Croell Concrete is Bill Wadehul, (608) 386-4147.

#### **Advanced Notification**

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

Lane closures	3 business days
Service Ramp closures	3 business days
Extended closure hours	3 business days
System Ramp closures	7 calendar days
Local Street openings/closings	7 calendar days
Project Start	14 calendar days
Full Freeway closures	14 calendar days
Construction stage changes	14 calendar days
Detours	14 calendar days

Notify the engineer if there are any changes in the schedule, early completions, or cancellations for scheduled work.

## **5. Holiday Work Restrictions.**

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying USH 12, STH 136 and CTH W traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, May 22, 2015 to 6:00 AM Tuesday, May 26, 2015 for Memorial Day;
- From noon Friday, July 3, 2015 to 6:00 AM Monday, July 6, 2015 for Independence Day;
- From noon Friday, September 4, 2015 to 6:00 AM Tuesday, September 8, 2015 for Labor Day;
- From noon Friday, May 27, 2016 to 6:00 AM Tuesday, May 31, 2016 for Memorial Day;
- From noon Friday, July 1, 2016 to 6:00 AM Tuesday, July 5, 2016 for Independence Day.

107-005 (20050502)

## **6. Utilities.**

This contract comes under the provision of Administrative Rule Trans 220.

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

Some utility work, as described below, is dependent on prior work being performed by the contractor at a specific site. Provide the engineer and the affected utility a good faith notice of when the utility is to start work at the site. Give notice 14 to 16 calendar days in

advance of when the site will be available to the utility. Follow up with a confirmation notice to the engineer and the utility not less than 3 working days before the site will be ready for the utility to begin its work.

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.

Utility companies will be performing utility work and adjustments within the limits and during the life of the project. The contractor shall cooperate and coordinate construction activities with these companies.

There may be abandoned utility facilities within the project limits. If a conflict with an abandoned utility facility is encountered, contact the appropriate utility owner/representative to coordinate construction activities and proper removal and disposal of said facility as necessary.

Additional detailed information regarding the location of relocated utility facilities is available on the permits issued to the utility companies. These permits can be viewed at the regional office during normal working hours. Contact the region's Utility Permit Coordinator, Mark Goggin at (608) 792-1366.

Utility working days shown herein are as defined in Wisconsin Administrative Code Chapter Trans 220.

Known utilities in the project area are as follows:

**Alliant Energy – Electric:** Alliant Energy has overhead electric facilities at the following locations:

- STH 136 (south-side)
- Hatchery Road (north-side)
- CTH W (both-sides)
- Gasser Road (north-side), west of Cowles Road
- Gasser Road (south-side), east of Cowles Road
- Cowles Road (west-side)
- USH 12 (west-side), (underbuilt with ATC transmission line)
- Station 526+00 to End Project
- Lehman Road (south-side)
- Ski Hi Road (north-side)
- Commerce Avenue (south-side)



Overhead lines may be in conflict with the proposed grading at the following locations:

LOCATION	STATION	-	STATION	LT/RT
STH 136	85+25LE	-	109+31LE	RT
HATCHERY ROAD	703+50HR	-	703+50HR	LT
CTH W	187+50WE	-	211+25WE	LT/RT
GASSER ROAD	290+00GR	-	298+00GR	LT
GASSER ROAD	298+00GR	-	307+00GR	RT
COWLES ROAD	468+00EB	-	485+00EB	RT
USH 12	523+00EB	-	523+00EB	LT/RT
USH 12	528+00EB	-	528+00EB	LT/RT
USH 12	532+00EB	-	532+00EB	LT/RT
USH 12	536+00EB	-	536+00EB	LT/RT
USH 12	537+00EB	-	537+00EB	LT/RT
USH 12	549+00EB	-	549+00EB	LT/RT
LEHMAN ROAD	491+00	-	499+00	RT
USH 12	564+50EB	-	564+50EB	LT/RT
SKI HI ROAD	600+00SH	-	610+00SH	LT
USH 12	572+00EB	-	572+00EB	LT/RT
USH 12	596+00EB	-	596+00EB	LT/RT

The existing overhead line along STH 136 will be removed. New poles will be installed on the north side of STH 136 from the existing lines west of the construction limits to the STH 136 EB on-ramp. The lines will then go underground and proceed north and cross STH 136. The lines will continue underground on the north side of STH 136 until they cross under STH 136 after the east construction limits to an overhead line that will tie in with existing facilities.

The existing overhead lines west of USH 12 on Hatchery Road will remain. The existing overhead line to the east of USH 12 on Hatchery Road will also remain except for a pole that is located in the center of the future cul-de-sac. This pole will be removed. An existing line will be removed that served a building that will also be removed with this project. A new underground line will come off the existing pole on the north side of Hatchery to supply power to the Baraboo Wisconsin Congregation Jehovah's Witnesses.

Alliant will retire the existing overhead line that is currently attached to ATC's poles. The underground crossing on CTH W at Station 191+33WE will also be abandoned. Two existing underground circuits in an easement will remain in place and Alliant will work with contractor to lower if required. Alliant will install a new underground cable parallel to an existing one from 191+33WE to 195+00WE on easement. The existing underground cable that continues across USH 12 will be abandoned. Two new circuits will continue along right-of-way going southeast until approximately 417+00EB where the circuits will continue in conduit the entire width of right-of-way at an approximate elevation of 970'.

The existing pole line along the north side of Gasser Road from 285+00GR to 295+60GR will remain. The continuation of the overhead line to the east will be retired from 295+60GR to 309+85GR. From 309+85GR to 315+00GR, the existing line will remain in place. The overhead line along existing Cowles Rd will be retired to construction limits of Cowles Road meets existing at Station 13+00CR. That line will not be replaced.

Alliant will install new underground electric facilities along the west right-of-way of existing USH 12 near 515+00WB to the new cul-de-sac and then continue along the north side of Archibald's driveway to the residence. Alliant will coordinate with the contractor during construction to verify burial depths and location.

All Alliant Energy Electric facility relocations will be completed within 90 working days. The relocations will be completed prior to construction with the exception of the facilities that will be located along the north side of Archibald's driveway. Alliant will coordinate with the contractor to avoid conflict during installation.

**Alliant Energy – Gas:** Alliant Energy has underground natural gas facilities at the following locations:

- STH 136 (south-side)
- Hatchery Road (south-side)
- CTH W (north-side)
- Commerce Avenue (south-side)

Underground lines may be in conflict with the proposed grading at the following locations:

LOCATION	STATION	-	STATION	LT/RT
STH 136	89+75LE	-	109+31LE	RT
CTH W	207+00WE	-	211+25WE	RT
HATCHERY ROAD	693+75HR	-	704+00HR	RT

Alliant will abandon the existing 4" plastic main that runs along STH 136. The contractor may remove as necessary. New gas main will be installed along the northern right-of-way from 89+00LE until 95+26LE where the line will cross to the south and the main will then continue north along USH 12 right-of-way to approximately Station 359+00EB. At this point, the gas main will be bored to the east to the eastern USH 12 right-of-way at an elevation of approximately 920'. The gas main should be 5' to 10' off of the underground electric that will be bored as well. The gas main will then go southeast along STH 136 right-of-way to east to 109+80LE and tie into existing main.

Existing 2" plastic main that runs along Hatchery Road will remain in place. If any grading conflicts occur, Alliant will work with the contractor to adjust the main. The existing service going south along USH 12 will be abandoned to the building removal site.

Alliant is abandoning the existing 4" plastic main on the north side of CTH W from Station 207+41WE to Station 211+30WE. Contractor may remove if necessary. The existing gas main crossing at 211+30WE will remain in place as well as all facilities to the east of that crossing.

All Alliant Energy Gas relocations will be completed within 30 working days. The relocations will be completed prior to construction. Some existing facilities do not appear to be in conflict, however if there is a conflict, Alliant will work with the contractor to make adjustments.

**American Transmission Company (ATC):** ATC has overhead transmission facilities at the following locations:

- Baraboo River
- CTH W (both-sides)

Overhead lines may be in conflict with the proposed grading at the following locations:

LOCATION	STATION	-	STATION	LT/RT
BARABOO RIVER	380+25EB	-	380+25EB	LT/RT
CTH W	187+50WE	-	211+25WE	LT/RT

Two existing structures along the south side of the Baraboo River will be removed to avoid conflict with the bridge abutments. These structures will be replaced by four structures. Two structures will be located on each side of the bridge and the other two will be located south of the bridge on each side of USH 12.

Nine existing structures will be removed to avoid conflict with the grade cuts and interchange configuration along CTH W. They will be replaced by six structures. Two structures will be located on the north side of CTH W and west of the CTH W off-ramp. From there, the line will go south along the CTH W eastbound on-ramp. The line will then span USH 12 to a structure south of the CTH W. Three more structures will be located east of CTH W westbound off-ramp on the south side of CTH W to an existing facility at Commerce Avenue.

All ATC relocations will be completed within 30 working days. The relocations will be completed by July 2015. All other relocations not described above should be notified to ATC at least 5 working days in advance of when relocations are needed. Allow 5 working days for relocation.

Working clearances need to be maintained from the ATC 69 kV lines based on the latest OSHA requirements at all times. ATC shall be notified prior to any excavation within 20 feet of the ATC structures. No storage of spoils or temporary fill material is allowed under the transmission line at any time. ATC's contact for project meeting invites and excavation notifications will be Rodger Ludlum at (608) 622-9225.

**CenturyLink:** CenturyLink has underground/overhead fiber optics facilities at the following locations:

- STH 136 (north-side), underground
- Hatchery Road (both-sides), underground
- CTH W (both-sides), underground and overhead
- Gasser Road (south-side), underground
- Cowles Road (west-side), underground
- USH 12 (west-side), underground; Skillet Creek Road to Lehman Road
- Lehman Road (north-side), underground
- USH 12 (east-side), underground; Lehman Road to end of project
- Ski Hi Road (north-side), underground

CenturyLink has known conflicts along the project at the following areas:

LOCATION	STATION	-	STATION	LT/RT
STH 136	85+00LE	-	109+31LE	LT/RT
HATCHERY ROAD	693+75HR	-	704+00HR	LT/RT
CTH W	207+00WE	-	211+25WE	LT/RT
GASSER ROAD	290+00GR	-	307+00GR	RT
GASSER ROAD	468+00EB	-	483+00EB	RT
USH 12	512+00EB	-	605+73EB	LT/RT
LEHMAN ROAD	491+00LR	-	499+00LR	RT
SKI HI ROAD	600+00SH	-	610+00SH	LT

CenturyLink will replace the existing facilities starting at Station 82+50LE along the STH 136 north right-of-way line. The replacement will continue along the right-of-way until the Station 96+07LE. New roadway crossings will be bored from the new facilities along the north STH 136 right-of-way line to the south at Stations 87+25LE and 95+25LE. The new facilities will then proceed north along the USH 12 right-of-way to Station 358+00WB. The new facilities will be bored from the USH 12 west right-of-way line to the USH 12 east right-of-way line crossing USH 12 at Station 358+00WB. CenturyLink will then continue south along the USH 12 east right-of-way to Station 104+14EB. The new facilities will then progress east along the STH 136 north right-of-way to Station 106+65LE. Lastly the new facilities will be bored south across STH 136 to existing facilities near the STH 136 south right-of-way.

CenturyLink will begin the relocation at Station 693+85HR on the north side of Hatchery Road. The relocation will continue east along the Hatchery Road north right-of-way. The new facility will then be bored from the USH 12 west right-of-way under the USH 12 to the USH 12 east right-of-way. CenturyLink will then proceed east along the Hatchery Road north right-of-way to Station 703+35HR.

On CTH W, CenturyLink will replace the facilities beginning at Station 186+21WE on the CTH W south right-of-way. The replacement will proceed east along the CTH W south right-of-way to Station 195+00WE. The new facility will then continue along the USH 12 west right-of-way to the south to Station 417+60EB. The facilities will then be bored under USH 12 from the USH 12 west right-of-way to the USH 12 east right-of-way. From the USH 12 east right-of-way the new facility will continue north to the CTH W south right-of-way line. From the CTH W south right-of-way line the cable will then advance east to Station 210+50WE. The new facilities will be bored north under CTH W. Lastly the new facilities will be bored under Commerce Avenue to the east to existing facilities.

CenturyLink will relocate the existing facilities beginning at Station 291+50GR on the Gasser Road south right-of-way. The new facilities will proceed to the east along the right-of-way. At Station 294+86GR, the facilities will then continue southeast along the Cowles Road west right-of-way. The new facilities will continue along the Cowles Road west right-of-way to Station 16+00CR. At Station 28+30CR, CenturyLink will begin a bore from the Cowles Road west right-of-way to the USH 12 east right-of-way. At the USH 12 east right-of-way, the new facilities will continue north along to the Gasser Road south right-of-way. The new facilities will then proceed along the Gasser Road south right-of-way to Station 309+70GR.

CenturyLink will begin the relocation at the existing facilities on existing USH 12 at Station 514+50EB. Two new facilities will run parallel to the southwest to the USH 12 east right-of-way. From the USH 12 east right-of-way, the two new facilities will proceed northwest along the right-of-way. At Station 513+00WB the two facilities on the USH 12 east right-of-way will be bored to the west to the USH 12 west right-of-way. The new facilities will proceed south along the USH 12 west/Lehman Frontage road right-of-way to Station 547+00EB. From Station 547+00EB, the two new facilities will proceed southwest to the USH 12 west right-of-way. The facilities will continue along the USH 12 west right-of-way to Ski Hi Road. The facilities will then be bored under USH 12 to the USH 12 east/Ski Hi Road north right-of-way. The two new facilities will then cross from the USH 12 east/Ski Hi north right-of-way to the USH 12 east/Ski Hi south right-of-way through a bore. From the USH 12 east/Ski Hi south right-of-way, the new facilities will continue south along the right-of-way to Station 605+37EB. The two facilities will be bored under USH 12 to the existing facilities on the USH 12 west right-of-way.

From the new facilities at the USH 12 and Lehman Road intersection, a new facility will proceed along the Lehman Road north right-of-line to the west to station 490+80LR.

CenturyLink will continue from the new facilities at the USH 12 east/Ski Hi road north right-of-way to the east along the Ski Hi Road north right-of-way. The two new facilities will connect to the existing facilities at Station 612+58SH.

All CenturyLink relocations will be completed within 120 working days. Relocations shall be completed during construction. CenturyLink shall coordinate with the contractor to schedule their relocations. The contractor shall contact CenturyLink 30 working days prior to start of construction.

**Charter Communications:** Charter Communications has facilities at the following locations:

- STH 136 (south-side), overhead; attached to Alliant Energy's poles
- CTH W (north-side), underground
- Crossing USH 12 at Station 536+50, overhead attached American Transmission Company's poles
- USH 12 (west-side), overhead attached to American Transmission Company's poles; Station 526+00 to End Project
- Commerce Avenue (south side)

Underground/overhead lines may be in conflict with the proposed grading at the following locations:

LOCATION	STATION	-	STATION	LT/RT
STH 136	85+25LE	-	109+31LE	RT
USH 12	526+00EB	-	605+73EB	LT/RT
CTH W	187+50WE	-	211+25WE	LT

Charter will coordinate the relocation of their aerial facilities with Alliant Energy along STH 136 and CTH W prior to construction. All other underground facilities to be moved as needed. Give Charter a 5 working days notice in advance of when relocations are needed. Allow 5 working days for relocation.

**City of Baraboo:** The City of Baraboo has underground water and sanitary sewer facilities at the following locations:

- Commerce Avenue 16" water main starting at 12+45 CC and going east
- Commerce Avenue 8" PVC sanitary sewer starting at 12+50 CC and going east
- CTH W sanitary sewer located at 209+13 WE and going east
- CTH W water main at 209+25 WE

The City of Baraboo will expand their existing water and sanitary sewer facilities on Commerce Court. The water main will extend 247' west and will be 12" diameter. This water main will require a 16"x12" reducer to tie into existing water main. The sanitary sewer will extend 260' west and will be 8" PVC that will tie into existing 8" PVC.

The existing water main hydrant on the north side of CTH W at Station 209+90 WE will be relocated south of the proposed sidewalk. The existing water main at Station 209+25 WE will be extended 350' to the southwest and cross CTH W. The existing sanitary sewer on the south side of CTH W ending at 209+13 WE will be extended 200' southwest and end near the water main addition.

The City of Baraboo work on Commerce Court will be completed during the Summer of 2015. All remaining work will be completed in coordination with the contractor during construction of the CTH W portion of the project in the Summer of 2016.

**Northern Natural Gas:** Northern Natural Gas has facilities at the following locations:

- West of existing USH 12 throughout project limits
- Crossing Gasser Road 3500' west of USH 12, 12"/8"/6" lines
- Crossing Cowles Road 350' south of Gasser Road, 6"/6" lines
- Crossing Lehman Road 1100' west of USH 12, 12" line

Underground lines may be in conflict with the proposed grading at the following locations:

LOCATION	STATION	-	STATION	LT/RT
USH 12 EB/WB	471+50EB	-	472+00EB	LT/RT
COWLES ROAD	26+00CR	-	27+50CR	LT/RT

Northern Natural Gas (NNG) facilities will relocate the existing gas main to a minimum of 5 feet below the lowest point of the proposed USH 12 excavation. The existing pipelines will be removed after the new lines are installed.

Mechanical equipment shall not be used for excavation within 24 inches of the pipe. A minimum of 3 feet of cover is required over the pipeline. An NNG representative must be present at all times when excavation work is being performed within 25 feet of the pipeline. The contractor shall provide NNG a 48 hour notice prior to working in the area.

**Village of West Baraboo:** The Village of West Baraboo has underground water and sanitary sewer facilities at the following locations:

- STH 136 sanitary sewer from 108+84 LE to 110+50 LE
- STH 136 (south-side), 8"/10" water main

All water main and sanitary sewer work is included as part of the project as shown in the plans.

## 7. Other Contracts.

The Wisconsin Department of Transportation plans on letting the following projects:

Project 1674-00-82, Lake Delton – Ski Hi Road, Terrytown Road – Ski Hi Road, USH 12, Sauk County, which will construct the Baraboo River, Skillet Creek and Skillet Creek Tributary structures within the limits of this project, in July 2015. Coordination with the contractor on this project will be required and is incidental to the items of work in this contract. More information on coordination is contained in the Prosecution and Progress section of these special provisions.

Project 1674-00-81, Lake Delton – Ski Hi Road, Terrytown Road – Ski Hi Road Phase 3, USH 12, Sauk County, which will construct grading and structures on USH 12 south of Point of Rocks and USH 12 paving from Terrytown Road – Ski Hi Road, in July 2016. Coordination with the contractor on this project may be required and is incidental to the items of work in this contract.

**8. Work within Railroad Property.**

Do not perform any work within 50' of the Wisconsin and Southern Railroad property.

**9. Mandatory Pre-Bid Meeting.**

*Supplement standard spec 102.3.1 with the following:*

Prospective bidders are required to attend a mandatory pre-bid meeting on November 13, 2014 from 1:00 PM – 3:00 PM in Room B-24 of the Sauk County West Square Building at 505 Broadway Street in Baraboo, WI.

No meeting minutes will be prepared. Issues discovered at the meeting will be handled by addendum.

102-010 (20041504)

**10. Construction Over or Adjacent to Navigable Waters.**

*Supplement standard spec 107.19 with the following:*

The Baraboo River, Skillet Creek, Skillet Creek Tributary are classified as a navigable waterway.

107-060 (20040415)

**11. Hauling Restrictions.**

*Supplement standard spec 107.2 as follows:*

Two weeks in advance of any proposed hauling on local roads, present a haul route to and obtain necessary permits from the Town of Baraboo, the Village of West Baraboo, the City of Baraboo, and any other affected municipality. The haul route submittal shall include the months, days of the week, time of day, types of trucks, and anticipated number of loads to be hauled on the affected local road.



To obtain hauling permit information please contact the following:

Town of Baraboo  
Clerk: Barbara A. Terry  
Phone: (608) 356-5170

Town of Sumpter  
Clerk: Donna Ziegler  
Phone: (608) 643-8483

Village of West Baraboo  
Clerk: Kathy Goerks  
Phone: (608) 356-2516

City of Baraboo  
Clerk: Cheryl Giese  
Phone: (608) 355-2700

Present any permits or correspondence with the local governments regarding the haul roads to the engineer prior to hauling on the local roads.

At all times conduct construction operations in manner that will cause a minimum of inconvenience to the free flow of vehicles on roadways carrying USH 12, STH 136 and CTH W traffic. The contractor will be allowed access to these roads at locations approved by the engineer.

When hauling across any public roads, provide the necessary flagging and signing to control the construction equipment movements. Do not impede traffic flow on the public roads with the flagging operations.

## **12. Environmental Protection, Baraboo Range National Natural Landmark.**

There shall be no construction materials removed from the Baraboo Range National Natural Landmark (BRNNL) as a result of construction activities for this contract. This includes, but shall not be limited to, any existing quarries, pits or other materials mining operations currently operating within the BRNNL.

Any change to this limitation will require submitting a written request by the contractor to the engineer, subsequent review and concurrence by the Department of Natural Resources, and final approval by the department.

The BRNNL encompasses land within the following Townships:

Town of Baraboo Clerk: Barbara A. Terry Phone: (608) 356-5170	Town of Honey Creek Clerk: Jennifer R. Evert Phone: (608) 544-2012
Town of Excelsior Clerk: Lynette M. Gurgel Phone: (608) 522-5115	Town of Merrimac Clerk: Tim Mc Cumber Phone: (608) 493-2588
Town of Freedom Clerk: Melody Rehr Phone: (608) 522-4343	Town of Sumpter Clerk: Donna Ziegler Phone: (608) 643-8483
Town of Greenfield Clerk: Mary Friesen Phone: (608) 356-0054	Town of Westfield Clerk: Ann D. Leake Phone: (608) 727-3291

Contact the Townships regarding the location of the BRNNL within those Townships.

A map of the BRNNL is available by contacting: Jeremy Krachey, 3550 Mormon Coulee Road, La Crosse, Wisconsin 54601, (608) 789-5702, [Jeremy.krachey@dot.wi.us](mailto:Jeremy.krachey@dot.wi.us).

### **13. Erosion Control.**

*Add the following to standard spec 107.20:*

Pursue operations in a timely and diligent manner, continuing all construction operations methodically from the initial topsoil removal through the subsequent grading and re-topsoiling to minimize the period of exposure to possible erosion. Utilize temporary and permanent erosion control measures as shown in the plans or as directed by the engineer.

Re-topsoil graded areas, as designated by the engineer, immediately after grading is completed within those areas. Seed, fertilize and mulch or erosion mat within ten calendar days after placement of topsoil in all areas.

### **14. 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 Jeremy Krachey, 3550 Mormon Coulee Road, La Crosse, WI 54601, (608) 789-5702.  
107-054 (20080901)

## **15. Coordination with Businesses.**

The contractor shall arrange and conduct a meeting between the contractor, the department, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting a minimum of two weeks prior to the start of work under this contract and hold one meeting per month thereafter.

108-060 (20030820)

## **16. Municipality Acceptance of Sanitary Sewer and Water Main Construction.**

Both the department and Village of West Baraboo personnel will inspect construction of sanitary sewer and water main under this contract. However, construction staking, testing, and acceptance of the sanitary sewer and water main construction will be by West Baraboo.

105-001 (20140630)

## **17. Referenced Construction Specifications.**

Construct the work enumerated below conforming to the Village of West Baraboo Standard Sewer and Water Specifications for WisDOT Let Projects. If there is a discrepancy or conflict between the referenced specification and the standard specifications regarding contract administration, part 1 of the standard specifications governs.

Conform to the referenced construction specifications for the following:

- Fire Hydrant, Item SPV.0060.450; Water valve and Box 6-Inch, Item SPV.0060.451; Water valve and Box 8-Inch, Item SPV.0060.452; Water valve and Box 12-Inch, Item SPV.0060.453; Tee 12-Inch x 6-Inch, Item SPV.0060.454; Tee 12-Inch x 8-Inch, Item SPV.0060.455; Tee 12-Inch x 12-Inch, Item SPV.0060.456; Tee 8-Inch x 6-Inch, Item SPV.0060.457; Bend 8-Inch, Item SPV.0060.458; Bend 12-Inch, Item SPV.0060.459; Plug 8-Inch, Item SPV.0060.460; Plug 12-Inch, Item SPV.0060.461; Reducer 12-Inch x 6-Inch, Item SPV.0060.462.
- 1-Inch Corporation, Curb Stop and Box, Item SPV.0060.463.
- Connect to Existing Water Main, Item SPV.0060.464.
- Removing Fire Hydrant, Item SPV.0060.465.
- Removing Valve and Box, Item SPV.0060.466.
- Removing Existing Curb Stop and Box, Item SPV.0060.467.
- Abandon Existing Water Main, Item SPV.0060.468.
- Sanitary Sewer Wye 8x6 Inch, Item SPV.0060.469; Sanitary Sewer Plug SDR 35 8-Inch, Item SPV.0060.470.
- Tracer Wire Termination Box, Item SPV.0060.471.
- Removing Sanitary Manhole, Item SPV.0060.472.
- Adjusting Sanitary Manhole Barrel Section, Item SPV.0060.473.
- Connect to Existing Sanitary Sewer, Item SPV.0060.474.

- Sanitary Manhole Cover, Item SPV.0060.475; Sanitary Manhole Chimney Seal, Item SPV.0060.476.
- Construction Staking Sanitary Sewer System, Item SPV.0060.477.
- Construction Staking Casing Pipe, Item SPV.0060.478.
- Water Main Ductile Iron 12-Inch, Item SPV.0090.450; Water Main Ductile Iron 8-Inch, Item SPV.0090.451; Water Main Ductile Iron 6-Inch, Item SPV.0090.452.
- Water Main Copper Service 1-Inch, Item SPV.0090.453.
- Removing Existing Water Main, Item SPV.0090.454; Removing Existing Copper Water Service, Item SPV.0090.455.
- Removing Existing Asbestos Cement Water Main, Item SPV.0090.456.
- Sanitary Sewer Main SDR 35, 8-Inch, Item SPV.0090.457; Sanitary Sewer Main C900, 8-Inch, Item SPV.0090.458; Tracer Wire, Item SPV.0090.459.
- Sanitary Sewer Lateral, 6-Inch, Item SPV.0090.460.
- Removing Sanitary Sewer, Item SPV.0090.461.
- Casing Pipe Reinforced Concrete Class V 30 Inch, Item SPV.0090.462
- Construction Staking Watermain, Item SPV.0090.463.
- Sanitary Manhole, Item SPV.0200.450.

105-002 (20130615)

## **18. Electrical Work By Others.**

Under project 1674-00-80, the Wisconsin Department of Transportation Southwest Region Electrical Unit will perform the following work for all department owned lighting systems:

- Submit application, authorization and payment for electrical service installation
- Verify the location of all concrete bases prior to constructing
- Verify the configuration and orientation of cabinet bases and adjacent pullboxes prior to constructing
- Verify the numbers/letters for use with plaques sequence identification (assume a minimum of 15 characters for bidding).

Contact information for the Wisconsin Department of Transportation Southwest Region Electrical Unit: Andy Winga, 3550 Mormon Coulee Road, La Crosse, WI 54601, (608) 785-9061.

## **19. Archaeological and Historical Site Protection.**

Un-cataloged burial site 47SK665/BSK-0063 (Duncan Gravesite) is located in the area of the Gasser Road overpass as identified on the plans. The department will have an archaeologist present to monitor all project-related ground-disturbing activities within the boundaries of the site. Provide two weeks' notice to the Environmental Services Section before doing any work in the areas of these sites. Environmental Services will provide a qualified archaeologist to be on site at all times when work occurs near these areas. The contact at Environmental Services is Jim Becker, (608) 261-0137.

If human bone is discovered during construction, cease work activities immediately and contact the Wisconsin Historical Society at (800) 342-7834 or (608) 264-6507 for compliance with Wis. Stat. 157.70 regarding the protection of human remains.

Point of Rocks outcropping is on the National Register of Historic Places. Place safety fence adjacent to the Point of Rocks outcropping as shown in the plans for protection.

## **20. General Requirements for Blasting Rock.**

Perform all blasting in compliance with the Wisconsin Administrative Code, Chapter SPS 307.

### **Blasting Plan Submittal**

Not less than two weeks prior to commencing blasting operations, or at any time you propose to change the drilling and blasting methods, submit a Blasting Plan to the engineer for review. No work associated with blasting will be permitted until the plan is approved by the engineer. Include in the blasting plan full details of the drilling and blasting patterns and controls that will be used for both controlled and production blasting. Include the following minimum information in the blasting plan:

1. Station limits of proposed shot.
2. Plan and section views of proposed drill pattern including free face, burden, blasthole spacing, blasthole diameters, blasthole angles, lift height, and subdrill depth.
3. Loading diagram showing type and amount of explosives, primers, initiators, and location and depth of stemming.
4. Initiation sequence of blastholes including delay times and delay system.
5. Manufacturer's data sheets for all explosives, primers, and initiators to be employed.
6. Traffic Control Plan.

The blasting plan submittal is for quality control and record keeping purposes. Review of the blasting plan by the engineer does not relieve the contractor of his/her responsibility for the accuracy and adequacy of the plan when implemented in the field.

### **Insurance**

A certificate of insurance shall be furnished to WisDOT in order to perform blasting within or near the limits of the highway right-of-way. The certificate of insurance shall:

- Be issued to the person, company or unit of government responsible for the proposed blasting.
- Clearly identify on the certificate that X, C, U coverage (explosion, collapse and underground) is included
- Be adequate enough to cover any and all claims, damages, liabilities, awards or costs that might derive from or be attributable to blasting.
- Indicate the amount of single limit liability coverage. In no case shall it be less than \$1,000,000 insofar as the works within or near highway right-of-way are concerned. A minimum of \$5,000,000 in excess liability coverage is also required.

- Contain the following endorsement, “The State of Wisconsin, its employees, agents and officers are named as additional insured insofar as the works of the project are concerned.”

**Safety**

The contractor shall protect all persons and properties from any injury or damage throughout all phases of the permitted work. The contractor shall notify, or cause to be notified, the owners of all public utilities, private or cooperatively owned utilities, and the owners and occupants of properties that might be affected by the work, prior to initial operations taking place.

**Immediately notify** the engineer of any incidents of fly rock, damage to any personal property or existing roadway that is open to traffic, and any violations of the SPS 307 statute. Failure to do so is a SAFETY VIOLATION and all work on the project will be stopped until the situation has been corrected.

Provide the engineer a weekly schedule by close of business Wednesday the previous week, indicating station, location, size of blasts and traffic control planned for the week. In addition, notify the engineer one hour prior to each blast.

Observe the entire blast area for a minimum of 5 minutes following a blast to guard against rock or debris fall before commencing work in the area.

The engineer will, at all times, have the authority to prohibit or halt the contractor's blasting operations if it is apparent that through the methods being employed, the required slopes are not being obtained in a stable condition, the safety and convenience of the traveling public is being jeopardized, or vibration levels above the allowable levels occur.

**Condition Surveys**

Conduct and document pre-blast and post-blast surveys of any nearby buildings or structures as required by the scaled-distance equation specified in Chapter SPS 307.41 of the Wisconsin Administrative Code. Make right of entry arrangements with the property owners for these condition surveys. Prior to any blasting, make the pre-blast survey records available to the engineer for review. After completion of blasting operations, perform a post-blast survey and make these records available to the engineer for review. The contractor shall be responsible for any damage resulting from blasting.

These condition surveys shall consist of visually inspecting and recording all existing defects in the structures before and after blasting operations. Photographs and/or videotape may be used to assist in documentation. Submit a written report to the department detailing the visual and photographic investigation of potentially affected structures. This report will include copies of the pre-blast and post-blast surveys and discuss any discrepancies and findings of these surveys.

If at any time during the progress of the work, the methods of drilling and blasting do not produce the desired result of a uniform slope and shear face, within the tolerances specified, drill, blast, and excavate in short sections, not exceeding 100 feet in length, until a technique is arrived at that will produce the desired results. Extra cost resulting from this requirement shall be borne by the contractor.

### **Vibration Control and Monitoring**

All vibration control and monitoring shall comply with SPS 307.43, Instrumentation and SPS 307.44, Control of Adverse Effects.

Whenever there is a potential for vibration damage to adjacent buildings, structures, or utilities, monitor each blast with an approved seismograph located, as approved, between the blast area and the closest structure subject to blast damage, and as close as practical to the subject structure, and in direct line between the blast zone and the subject structure . Peak particle velocity shall not be allowed to exceed the safe limits of the nearest structure subject to vibration damage.

Vibration monitoring shall be performed by a vibration specialist, subject to the engineer's approval. The vibration specialist shall monitor vibration levels in accordance to Chapter SPS 307.44 (4) of the Wisconsin Administrative Code and interpret the seismograph records to ensure that the seismograph data shall be effectively utilized in the control of the blasting operations with respect to the existing structures and utilities.

Chapter SPS 30 7.44 (4) - 2 of the Wisconsin Administrative Code states that the maximum allowable limit on ground vibration for structures **not** listed in Chapter SPS 7.44 (4) - 1 shall be established after consulting with the owner of the structure or utility. In no case shall these vibration limits exceed the following criteria:

<b>Structure Type</b>	<b>Maximum Peak Particle Velocity, (inches/second)</b>
Reinforced Concrete, Structures, Unoccupied	4.0
Steel Structures, Unoccupied	4.0
Buried Utilities	2.0
Wells and Aquifers	2.0
Green Concrete (Less than 7 days)	1.0

Furnish data recorded for each shot to the engineer prior to the next blast; the data shall include the following:

1. Identification of vibration monitoring instrument used.
2. Name of qualified observer and interpreter.
3. Distance and direction of recording station from blast area.
4. Type of ground at recording station and material on which the instrument is sitting.

5. Peak particle velocity and principal frequency in each component.
6. A dated and signed copy of records of seismograph readings.
7. A comparison of measured seismograph readings to maximum allowable readings identified in Chapter SPS 7 of the Wisconsin Administrative Code or as specified in this special provision.

If the recorded vibration data exceeds the allowable levels established in Chapter SPS 307 of the Wisconsin Administrative Code or as specified in this special provision, immediately halt further blasts until such time that you document changes in operations and can show that allowable vibration levels will be maintained.

### **Traffic**

The contractor shall indicate in the blasting plan all traffic impacts associated with the work. Traffic control shall detail proposed closures or detour routes, the time spans over which they are authorized and obligations of the contractor such as installing and maintaining work zone signs and devices.

The contractor shall arrange for flaggers or uniformed officers, with jurisdictional authority, to be positioned where they can safely stop and hold traffic at each trail, road, and highway approach to the blasting area, or traffic shall be safely detoured around the blasting area via a clearly marked route, which the local street authority and engineer approve.

The contractor shall provide and install sufficient warning signs and devices in accordance to the current edition of the Manual on Uniform Traffic Control Devices (MUTCD).

## **21. General Requirements for Sanitary Sewer and Water.**

The sanitary sewer and watermain work under this contract shall be performed in accordance to the requirements of the “Village of West Baraboo Standard Sewer and Water Specifications for WisDOT Let Projects”.

A copy of these specifications is available for viewing during normal working hours at the Village of West Baraboo office at 500 Cedar Street, West Baraboo, Wisconsin (phone: 608-356-2516). A copy of the specifications may be obtained at the office of MSA Professional Services, Inc. (MSA); 1230 South Boulevard, Baraboo, Wisconsin 53913; (608) 356-2771, upon receipt of a non-refundable shipping and handling fee of \$35.

All backfill materials, methods of backfilling and compaction shall meet or exceed all of the department’s specifications as specified in standard specs 207.3.6.2, and 607.3.5.

The Village of West Baraboo personnel or their designated representative will inspect construction of sanitary sewer and water mains and appurtenances under this contract. Village of West Baraboo personnel or their designated representative will observe all testing and determine final acceptance of the sanitary sewer and water main construction.



Existing water valves and fire hydrants may only be operated under the direct supervision of the Village of West Baraboo Department of Public Works.

Coordinate work with the Village of West Baraboo Department of Public Works (608-356-2516). The Village of West Baraboo storage area is located on Zajak Street in West Baraboo (Village water tower site).

## **22. Backfilling for Sanitary Sewer and Watermain.**

Backfill for sanitary sewers and water mains is the material placed between the bedding and the ground surface. Backfill shall be Type II. Type II backfill shall be suitable excavated material, or other approved material, placed in uniform layers and mechanically compacted, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”.

## **23. Baraboo Dells Airport Restrictions and Coordination.**

This project is located within the Airport Overlay Zoning and Height Limitation boundaries of the Baraboo Dells Airport. A map of the Airport Overlay Zoning and Height Restriction area is available online at the following link:

<http://cityofbaraboo.com> utilize a keyword search of Baraboo Dells Airport.

In accordance to Code of Federal Regulations (CFR), title 14, Part 77.13, notify the Federal Aviation Administration (FAA) of construction plans and the maximum height of cranes. Notify the FAA no later than 45 days before cranes need to be in the air. For notification, use the FAA’s Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) website at: <http://oeaaa.faa.gov/oeaaa/external/portal.jsp>

All height restrictions for cranes or other construction equipment shall be coordinated with the Airport Manager Cheryl Giese at (608) 355-2270, prior to construction operations taking place.

The following information shall be provided to the Airport Manager and engineer prior to the erection of any cranes:

- The name of the person(s) that will be onsite during all hours when cranes are in operation as well as a backup contact person.
- A telephone number, cell number and pager number of the onsite person and backup person for where they can be reached during normal working hours as well as after work hours. This is needed in the event immediate action is required to prevent a crane from becoming a hazard to safe flight operations at the airport.
- An estimated work schedule for each crane location consisting of the types and heights of the cranes, date of erection, duration of work and removal of the crane. During the construction period, notice shall be given to the Airport Manager a minimum of 48 hours prior to the actual erection of any crane.

Cranes at all locations shall be fitted with flashing white strobe lights at their highest point. The airport shall be contacted immediately in the event a strobe light becomes inoperable and the crane shall be lowered immediately until the strobe light is operable.

All cranes shall be lowered at the end of each workday, at night or when not needed.

Adhere to the above stipulations and conditions and coordinate construction equipment activities with the engineer and with Airport Manager.

Revisions to any of the above information shall be coordinated with the Airport Manager and the engineer. All costs for this coordination are considered incidental to the work.

## **24. Embankment Construction.**

Construct the proposed embankments from Station 504+00 EB to Station 525+00 EB, in accordance to the plan, standard spec 207, and as hereinafter provided.

The embankment fill shall be placed to the extent of the proposed side slopes.

The control and placement of embankment fill will be based on the results of monitoring geotechnical instrumentation in the field. Install the vibrating wire piezometer instrumentation system at locations EB2, EB5, EB7 and EB8 prior to any excavations and at locations EB1, EB3, EB4 and EB6 after excavation and backfilling up to 1-foot above original ground.

Construct and compact the fill in accordance to standard spec 207.3.6.2.

The engineer may stop embankment construction operations at any time if instrumentation monitoring indicates impending movement or instability of the embankment fill.

Cooperate with the department and its representatives in the monitoring and protection of the geotechnical instrumentation in the embankment. Conduct construction activities such that the department has reasonable access to the terminal boxes and other geotechnical instrumentation. Take all necessary precautions to ensure that all geotechnical instrumentation is not damaged, displaced, or misaligned by contractor activities. Furthermore if a geotechnical instrument is damaged by construction operations, the contractor shall pay for the repair of the geotechnical instrument, or if necessary, the replacement and installation of a new geotechnical instrument.

Do not use excavated organic material for any portion of the embankment fill except as topsoil for landscaping purposes.

## **25. Marsh Excavation.**

Artesian conditions are present in the marsh excavation areas as shown in the plans. Do not exceed limits shown in plans so that the integrity of the artesian wells is maintained.

## **26. Soil Borings.**

The contractor can obtain soil boring information from Jeremy Krachey at WisDOT Southwest-La Crosse Region, (608) 789-5702.

## **27. 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 specs 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:

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

<sup>[1]</sup> 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.

<sup>[2]</sup> For 3-inch material, obtain samples at load-out.

<sup>[3]</sup> 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:

- An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
- 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.
- A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
- 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.
- Descriptions of stockpiling and hauling methods.

- Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
- 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:

<b>Required Certification Level:</b>	<b>Sampling or Testing Roles:</b>
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 Boulevard  
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:
  - Contractor individual QC tests.
  - Department QV tests.
  - Department IA tests.
  - 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:

- Control limits are at the upper and lower specification limits.
- There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.
- 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.
- 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:
  - For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
  - 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:
  - A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
  - A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
  - 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:
  - One non-random test on the first day of placement.
  - 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:
  - Split sample testing.
  - Proficiency sample testing.
  - Witnessing sampling and testing.
  - Test equipment calibration checks.
  - Reviewing required worksheets and control charts.
  - 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)

## **28. Polymer Overlay, Item 509.5100.S.**

### **A Description**

This special provision describes furnishing and applying two layers of a two-component polymer overlay system to the bridge decks shown on the plans. The minimum total thickness of the overlay system shall be 1/4".

## B Materials

### B.1 General

Furnish materials specifically designed for use over concrete bridge decks. Furnish polymer liquid binders from the department's approved product list.

### B.2 Polymer Resin

The polymer resin base and hardener shall be composed of two-component, 100% solids, 100% reactive, thermosetting compound with the following properties:

Property	Requirements	Test Method
Gel Time <sup>A</sup>	15 - 45 minutes @ 73° to 75° F	ASTM C881
Viscosity <sup>A</sup>	7 - 70 poises	ASTM D2393, Brookfield RVT, Spindle No. 3, 20 rpm
Shore D Hardness <sup>B</sup>	60-75	ASTM D2240
Absorption <sup>B</sup>	1% maximum at 24 hr	ASTM D570
Tensile Elongation <sup>B</sup>	30% - 70% @ 7 days	ASTM D638
Tensile Strength <sup>B</sup>	>2000 psi @ 7 days	ASTM D638
Chloride Permeability <sup>B</sup>	<100 coulombs @ 28 days	AASHTO T277

<sup>A</sup> Uncured, mixed polymer binder

<sup>B</sup> Cured, mixed polymer binder

### B.3 Aggregates

Furnish natural or synthetic aggregates that have a proven record of performance in applications of this type. Furnish aggregates that are non-polishing, clean, free of surface moisture, fractured or angular in shape; free from silt, clay, asphalt, or other organic materials; and meet the following properties and gradation requirements:

Aggregate Properties:

Property	Requirement	Test Method
Moisture Content*	½ of the measured aggregate absorption, %	ASTM C566
Hardness	<sup>3</sup> 6.5	Mohs Scale
Fractured Faces	100% with at least 1 fractured face and 80% with at least 2 fractured faces of material retained on No.16	ASTM 5821
Absorption	≤1%	ASTM C128

\* Sampled and tested at the time of placement.

Gradation:

Sieve Size	% Passing by Weight
No. 4	100
No. 8	30 – 75
No. 16	0 – 5
No. 30	0 – 1

#### B.4 Required Properties of Overlay System

The required properties of the overlay system are listed in the table below:

Property	Requirement <sup>A</sup>	Test Method
Minimum Compressive Strength at 8 Hrs. (psi)	1,000 psi @ 8 hrs 5,000 psi @ 24 hrs	ASTM C 579 Method B, Modified <sup>B</sup>
Thermal Compatibility	No Delaminations	ASTM C 884
Minimum Pull-off Strength	250 psi @ 24 hrs	ACI 503R, Appendix A

<sup>A</sup> Based on samples cured or aged and tested at 75°F

<sup>B</sup> Plastic inserts that will provide 2-inch by 2-inch cubes shall be placed in the oversized brass molds.

#### B.5 Approval of Bridge Deck Polymer Overlay System

A minimum of 20 working days prior to application, submit product data sheets and specifications from the manufacturer, and a certified test report to the engineer for approval. The engineer may request samples of the polymer and/or aggregate, prior to application, for the purpose of acceptance testing by the department.

For materials not pre-qualified, in addition to the above submittals, submit product history/reference projects and a certified test report from an independent testing laboratory showing compliance with the requirements of the specification.

The product history/reference projects consist of a minimum of five bridge/roadway locations where the proposed overlay system has been applied in Wisconsin or in locations with a similar climate - include contact names for the facility owner, current phone number or e-mail address, and a brief description of the project.

Product data sheets and specifications from the manufacture consists of literature from the manufacturer showing general instructions, application recommendations/methods, product properties, general instructions, or any other applicable information.

## **C Construction**

### **C.1 General**

Conduct a pre-installation conference with the manufacturer's representative prior to construction to establish procedures for maintaining optimum working conditions and coordination of work. Furnish the engineer a copy of the recommended procedures and apply the overlay system according to the manufacturer's instructions. The manufacturer's representative familiar with the overlay system installation procedures shall be present at all times during surface preparation and overlay placement to provide quality assurance that the work is being performed properly.

Store resin materials in their original containers in a dry area. Store and handle materials according to the manufacturer's recommendations. Store all aggregates in a dry environment and protect aggregates from contaminants on the job site.

### **C.2 Deck Preparation**

#### **C.2.1. Deck Repair**

Remove all asphaltic patches and unsound or disintegrated areas of the concrete decks as the plans show, or as the engineer directs. Work performed to repair the concrete deck will be paid for under other items. Ensure that products used for deck patching are compatible with the polymer overlay system.

NOTE: Some polymer systems require concrete patch material to be in place a minimum of 28-days before overlaying - contact polymer manufacturer before completing deck patching/repair.

#### **C.2.2 Surface Preparation**

Determine an acceptable shotblasting machine operation (size of shot, flow of shot, forward speed, and/or number of passes) that provides a surface a profile meeting CSP 5 according to the International Concrete Repair Institute Technical Guideline No. 03732. If the engineer requires additional verification of the surface preparation, test the tensile bond strength according to ACI 503R, Appendix A of the *ACI Manual of Concrete Practice*. The surface preparation will be considered acceptable if the tensile bond strength is greater than or equal to 250 psi or the failure area at a depth of ¼ inches or more is greater than 50% of the test area. Continue adjustment of the shotblasting machine and necessary testing until the surface is acceptable to the engineer or a passing test result is obtained.

Prepare the entire deck using the final accepted adjustments to the shotblasting machine as determined above. Thoroughly blast clean with hand-held equipment any areas inaccessible by the shotblasting equipment. Do not perform surface preparation more than 24 hours prior to the application of the overlay system.

Prepare the vertical concrete surfaces adjacent to the deck a minimum of 2" above the overlay according to SSPC-SP 13 by sand blasting, using wire wheels, or other approved method.

Just prior to overlay placement, clean all dust, debris, and concrete fines from the prepared surfaces including the vertical surfaces with compressed air. When using compressed air, the air stream must be free of oil. Any grease, oil, or other foreign matter that rests on or has absorbed into the concrete shall be removed completely. If any prepared surfaces (including the first layer of the polymer overlay) are exposed to rain or dew, lightly sandblast (breeze blast) the exposed surfaces.

Protect drains, expansion joints, access hatches, or other appurtenances on the deck from damage by the shot and sand blasting operations and from materials adhering and entering. Tape or form all construction joints to provide a clean straight edge.

Create a transitional area approaching transverse expansion joints and ends of the deck using the shotblasting machine or other approved method. Remove 5/16" to 3/8" of concrete adjacent to the joint or end of deck and taper a distance of 3 feet.

The engineer may consider alternate surface preparation methods per the overlay system manufacturer's recommendations. The engineer will approve the final surface profile and deck cleanliness prior to the contractor placing the polymer overlay.

### **C.3 Application of the Overlay**

Perform the handling and mixing of the polymer resin and hardening agent in a safe manner to achieve the desired results according to the manufacturer's instructions. Do not apply the overlay system if any of the following exists:

- Ambient air temperature is below 50°F;
- Deck temperature is below 50°F;
- Moisture content in the deck exceeds 4.5% when measured by an electronic moisture meter or shows visible moisture after 2 hours when measured in accordance to ASTM D4263;
- Rain is forecasted during the minimum curing periods listed under C.5;
- Materials component temperatures below 50°F or above 99°F;
- Concrete age is less than 28 days unless approved by the engineer.
- The deck temperature exceeds 100°F.
- If the gel time is 10 minutes or less at the predicted high air temperature for the day.

After the deck has been shotblasted or during the overlay curing period, only necessary surface preparation and overlay application equipment will be allowed on the deck. Begin overlay placement as soon as possible after surface preparation operations.

The polymer overlay shall consist of a two-course application of polymer and aggregate. Each of the two courses shall consist of a layer of polymer covered with a layer of aggregate in sufficient quantity to completely cover the polymer. Apply the polymer and aggregate according to the manufacturer's requirements. Apply the overlay using equipment designed for this purpose. The application machine shall feature positive displacement volumetric metering and be capable of storing and mixing the polymer resins at the proper mix ratio. Disperse the aggregate using a standard chip spreader or equivalent

machine that can provide a uniform, consistent coverage of aggregate. First course applications that do not receive enough aggregate before the polymer gels shall be removed and replaced. A second course applied with insufficient aggregate may be left in place, but will require additional applications before opening to traffic.

After completion of each course, cure the overlay according to the manufacturer's instructions. Follow the minimum cure times listed under C.5 or as prescribed by the manufacturer. Remove the excess aggregate from the surface treatment by sweeping, blowing, or vacuuming without tearing or damaging the surface; the material may be re-used if approved by the engineer and manufacturer. Apply all courses of the overlay system before opening the area to traffic. Do not allow traffic on the treated area until directed by the engineer.

After the first layer of coating has cured to the point where the aggregate cannot be pulled out, apply the second layer. Prior to applying the second layer, broom and blow off the first layer with compressed air to remove all loose excess aggregate.

Prior to opening to traffic, clean expansion joints and joint seals of all debris and polymer. If required by the engineer, a minimum of 3 days following opening to traffic, remove loosened aggregates from the deck, expansion joints, and approach pavement.

#### C.4 Application Rates

Apply the polymer overlay in two separate courses in accordance to the manufacturer's instructions, but not less than the following rate of application.

Course	Minimum Polymer Rate <sup>A</sup> (GAL/100 SF)	Aggregate <sup>B</sup> (LBS/SY)
1	2.5	10+
2	5.0	14+

<sup>A</sup> The minimum total applications rate is 7.5 GAL/100 SF.

<sup>B</sup> Application of aggregate shall be of sufficient quantity to completely cover the polymer.

#### C.5 Minimum Curing Periods

As a minimum, cure the coating as follows:

	Average temperature of deck, polymer and aggregate components in °F							
Course	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-99
1	6 hrs.	5 hrs.	4 hrs.	3 hrs.	2.5 hrs	2 hrs	1.5 hrs.	1 hr.
2	8 hrs.	6.5 hrs.	6.5 hrs.	5 hrs.	4 hrs.	3 hrs.	3 hrs.	3 hrs.

#### C.6 Repair of Polymer Overlay

Repair all areas of unbonded, uncured, or damaged polymer overlay for no additional compensation. Submit repair procedures from the manufacturer to the engineer for approval. Absent a manufacturer's repair procedures and with the approval of the engineer, complete repairs according to the following: Saw cut the limits of the area to the top of the

concrete; remove the overlay by scarifying, grinding, or other approved methods; shot blast or sand blast and air blast the concrete prior to placement of polymer overlay; and place the polymer overlay according to section C.3.

**D Measurement**

The department will measure Polymer Overlay in area by the square yard, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
509.5100.S	Polymer Overlay	SY

Payment is full compensation for preparing the surface; for tensile bond testing; for providing the overlay; for cleanup; and for sweeping/vacuuming and disposing of excess materials. Concrete Deck Repair will be paid for separately.

509-030 (20130615)

- 29. Concrete Staining B-56-205, Item 517.1010.S.001; B-56-206, Item 517.1010.S.002; B-56-209, Item 517.1010.S.003; B-56-210, Item 517.1010.S.004; B-56-213, Item 517.1010.S.005; R-56-33, Item 517.1010.S.006; R-56-35, Item 517.1010.S.007; R-56-36, Item 517.1010.S.008.**

**A Description**

Furnish and apply a two coat concrete stain to the exposed concrete surfaces of the structure, as detailed in the plans and as hereinafter provided.

**B Materials**

**B.1 Mortar**

Use mortar for sack rubbing the concrete surfaces as given in standard spec 502.3.7.5 or use one of the following products:

Preblended, Packaged Type II Cement:      Tri-Mix by TK Products  
   Thoroseal Pearl Gray by Thoro Products

The mortar shall contain one of the following acrylic bonding admixtures mixed and applied in accordance to manufacturer's recommendations:

Acrylic Bonding Admixture:      TK-225 by TK Products  
   Achro 60 by Thoro Products  
   Achro Set by Master Builders



## **B.2 Concrete Stain**

Use concrete stain manufactured for use on exterior concrete surfaces, consisting of a base coat and a pigmented sealer finish coat. Use the following products, or equal as approved by the department, as part of the two coat finish system:

Tri-Sheen Concrete Surfer, Smooth by TK Products  
Tri-Sheen Acrylic by TK Products  
TK-1450 Natural Look Urethane Anti-Graffiti Primers by TK Products  
Safe-Cure and Seal EPX by Chem Masters  
H&C Concrete Stain Solid Color Water Based by Sherwin-Williams

## **C Construction**

### **C.1 General**

Furnish, prepare, apply, cure, and store all materials in accordance to the product manufacturer's specifications for the type and condition of application required.

Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining.

### **C.2 Preparation of Concrete Surfaces**

Provide a sack rubbed finish in accordance to standard spec 502.3.7.5, using mortar as indicated above on concrete surfaces with open voids or honeycombing.

Following the sack rubbing, clean all concrete surfaces that are to be coated to ensure that the surface is free of all laitance, dirt, dust, grease, efflorescence, and any foreign material and that the surface will accept the coating material according to product requirements. As a minimum, clean the surface using a 3000-psi water blast. Hold the nozzle of the water blaster approximately 6 inches from the concrete surface and move it continuously in a sweeping motion. Give special attention to smooth concrete surfaces to produce an acceptable surface texture. Correct any surface problems resulting from the surface preparation methods. Grit blasting of the concrete surface is not allowed.

### **C.3 Staining Concrete Surfaces**

Apply the concrete stain in accordance to the manufacturer's recommendations.

Apply the concrete stain when the temperature of the concrete surface is 45° F or higher, or as given by the manufacturer.

The color of the stain shall be as given on the plan. Tint the base coat to match the finish coat; the two coats shall be compatible with each other.

Do not begin staining the structure until earthwork operations are completed to a point where this work can begin without receiving damage. Where this work is adjacent to exposed soil or pavement areas, provide temporary covering protection from overspray or splatter.

#### **C.4 Test Areas**

Prior to applying stain to the structure, apply the stain to sample panels measuring a minimum of 48-inches x 48-inches and constructed to demonstrate workmanship in the use of the form liner specified on the structure if applicable. Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining. Prepare the concrete surfaces of the sample panels and apply stain using the same materials and in the same manner as proposed for the structure, including staining of the joints between the stones produced by the form liner if applicable. Do not apply stain to the structure until the department approves the test panels.

#### **C.5 Surfaces to be Coated.**

Apply concrete stain to the surfaces in accordance to the plan.

#### **D Measurement**

The department will measure Concrete Staining (Structure) in area by the square foot of surface, acceptably prepared and stained.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
517.1010.S.001	Concrete Staining B-56-205	SF
517.1010.S.002	Concrete Staining B-56-206	SF
517.1010.S.003	Concrete Staining B-56-209	SF
517.1010.S.004	Concrete Staining B-56-210	SF
517.1010.S.005	Concrete Staining B-56-213	SF
517.1010.S.006	Concrete Staining R-56-33	SF
517.1010.S.007	Concrete Staining R-56-35	SF
517.1010.S.008	Concrete Staining R-56-36	SF

Payment is full compensation for furnishing and applying the two coat system; for preparing the concrete surface; and for preparing the sample panels.

517-110 (20140630)

### **30. Concrete Staining Multi-Color B-56-205, Item 517.1015.S.001; B-56-206, Item 517.1015.S.002; B-56-209, Item 517.1015.S.003; B-56-210, Item 517.1015.S.004; B-56-213, Item 517.1015.S.005.**

#### **A Description**

Furnish and apply a multi-color concrete stain to the exposed concrete surfaces of the structure, as detailed in the plans and as hereinafter provided.

#### **B Materials**

##### **B.1 Mortar**

Use mortar for sack rubbing the concrete surfaces as given in standard spec 502.3.7.5 or use one of the following products:

Preblended, Packaged Type II Cement:      Tri-Mix by TK Products  
   Thoroseal Pearl Gray by Thoro Products

The mortar shall contain one of the following acrylic bonding admixtures mixed and applied in accordance to manufacturer's recommendations:

Acrylic Bonding Admixture:      TK-225 by TK Products  
   Achro 60 by Thoro Products  
   Achro Set by Master Builders

## **B.2 Concrete Stain**

Use concrete stain manufactured for use on exterior concrete surfaces. Use the following products, or equal as approved by the department:

Tri-Sheen Concrete Surfacer, Smooth by TK Products  
Tri-Sheen Acrylic by TK Products  
TK-1450 Natural Look Urethane Anti-Graffiti Primers by TK Products  
Safe-Cure and Seal EPX by Chem Masters  
H&C Concrete Stain Solid Color Water Based by Sherwin-Williams

## **C Construction**

### **C.1 General**

Furnish, prepare, apply, cure, and store all materials in accordance to the product manufacturer's specifications for the type and condition of application required.

Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining.

### **C.2 Preparation of Concrete Surfaces**

Provide a sack rubbed finish in accordance to standard spec 502.3.7.5, using mortar as indicated above on concrete surfaces with open voids or honeycombing.

Following the sack rubbing, clean all concrete surfaces that are to be coated to ensure that the surface is free of all laitance, dirt, dust, grease, efflorescence, and any foreign material and that the surface will accept the coating material according to product requirements. As a minimum, clean the surface using a 3000-psi water blast. Hold the nozzle of the water blaster approximately 6 inches from the concrete surface and move it continuously in a sweeping motion. Give special attention to smooth concrete surfaces to produce an acceptable surface texture. Correct any surface problems resulting from the surface preparation methods. Grit blasting of the concrete surface is not allowed.

### **C.3 Staining Concrete Surfaces**

Apply the concrete stain in accordance to the manufacturer's recommendations.

Apply the concrete stain when the temperature of the concrete surface is 45° F or higher, or as given by the manufacturer.

The color of the staining shall produce a multi-color effect that consists of multiple colors replicating varying natural stone coloration. Stain the joints between stones produced by the form liner to create the appearance of grouted joints.

Do not begin staining the structure until earthwork operations are completed to a point where this work can begin without receiving damage. Where this work is adjacent to exposed soil or pavement areas, provide temporary covering protection from overspray or splatter.

#### **C.4 Test Areas**

Prior to applying stain to the structure, apply the stain to sample panels measuring a minimum of 48-inches x 48-inches and constructed to demonstrate workmanship in the use of the form liner specified on the structure if applicable. Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining. Submit color samples to the department prior to staining the sample panels. Prepare the concrete surfaces of the sample panels and apply stain using the same materials and in the same manner as proposed for the structure, including staining of the joints between stones produced by the form liner. Do not apply stain to the structure until the department approves the test panels.

#### **C.5 Surfaces to be Coated.**

Apply concrete stain to the surfaces in accordance to the plan.

#### **D Measurement**

The department will measure Concrete Staining Multi-Color (Structure) in area by the square foot of surface, acceptably prepared and stained.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
517.1015.S.001	Concrete Staining Multi-Color B-56-205	SF
517.1015.S.002	Concrete Staining Multi-Color B-56-206	SF
517.1015.S.003	Concrete Staining Multi-Color B-56-209	SF
517.1015.S.004	Concrete Staining Multi-Color B-56-210, B-56-213	SF
517.1015.S.005	Concrete Staining Multi-Color B-56-213	SF

Payment is full compensation for furnishing and applying the coloring system; for preparing the concrete surface; and for constructing and staining the sample panels.  
517-115 (20140630)

**31. Architectural Surface Treatment B-56-205, Item 517.1050.S.001; B-56-206, Item 517.1050.S.002; B-56-209, Item 517.1050.S.003; B-56-210, Item 517.1050.S.004; B-56-213, Item 517.1050.S.005.**

**A Description**

Construct a concrete masonry architectural surface treatment on the exposed concrete surfaces of the structure, as detailed in the plans and as hereinafter provided.

**B Materials**

Use form liners that attach easily to the forming system, and do not compress more than 1/4-inch when poured at a rate of 10 vertical feet/hour.

Use a release agent that is compatible with the form liner and coloring materials.

Wall ties shall have set “break-backs” at a minimum of 3/4-inches from the finished concrete surface.

**C Construction**

**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 Form Liner Preparation**

Clean the form liner prior to each pour and ensure that it is free of any build-up. Visually inspect each liner for blemishes or tears, and repair if necessary per manufacturer’s recommendations.

Apply form release per manufacturer’s recommendations.

**C.3 Form Liner Attachment**

Place adjacent liners less than 1/4-inch from each other, attach liner securely to forms in accordance to the manufacturer’s recommendations, and coordinate wall ties with form liner and form manufacturer, e.g., diameter, size, and frequency.

**C.4 Surface Finishing**

Ensure that the textured surface is free of laitance; sandblasting is not permitted.

Grind or fill pouring blemishes.

**D Measurement**

The department will measure Architectural Surface Treatment (Structure) in area by the square foot of architectural surface, 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
517.1050.S.001	Architectural Surface Treatment B-56-205	SF
517.1050.S.002	Architectural Surface Treatment B-56-206	SF
517.1050.S.003	Architectural Surface Treatment B-56-209	SF
517.1050.S.004	Architectural Surface Treatment B-56-210	SF
517.1050.S.005	Architectural Surface Treatment B-56-213	SF

Payment is full compensation for producing the proposed architectural surface treatment including: preparing the foundation; finishing and protecting the surface treatment; and for properly disposing of surplus material.

517-150 (20110615)

## **32. Fence Safety, Item 616.0700.S.**

### **A Description**

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

### **B Materials**

Furnish notched conventional metal “T” or “U” shaped fence posts.

Furnish fence fabric meeting the following requirements.

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

### **C Construction**

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

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

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

### **D Measurement**

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

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
616.0700.S	Fence Safety	LF

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

616-030 (20070510)

**33. Landmark Reference Monuments.**

*Supplement standard spec 621 with the following:*

Contact Sauk County Surveyor, Partick Dederich at (608) 355-4474, 30 days prior to the start of construction to coordinate perpetuation of section corners that will be disturbed during construction.

Provide four witness monuments and one section corner monument for each section corner that is disturbed by construction operations.

**34. Mulching.**

*Supplement standard spec 627.2 with the following:*

Mulching material consists of straw or hay in an air-dry condition, wood excelsior fiber, wood chips, or other certified material of a similar nature that the engineer approves, and shall be certified as noxious weed seed free forage and mulch, as designated by the North American Weed Free Forage Certification Program. Utilize one of the suppliers as noted below or approved equal and shall provide documentation of certification of weed seed free forage and mulch.

Agrecol Corporation of Rock County  
Kratz Farms LLP of Washington County  
Russell Farms of Barron County  
Russ Anclam of Douglas County  
Frontier Farms of Walworth County

*Replace standard spec 627.3.2 with the following:*

Perform the work using Method B, Tackifier.

### 35. Stone or Rock Ditch Checks, Item 628.7560.S.

#### A Description

This special provision describes furnishing and installing stone or rock ditch checks as shown on the plans or as directed by the engineer, or both, and as hereinafter provided.

#### B Materials

Provide materials conforming to size requirements for size no. 2 coarse aggregate for concrete masonry or riprap in accordance to the standard spec 501.2.5.4.4. Railroad ballast or breaker run stone conforming to the following applicable gradations may also be used:

Railroad Ballast	
Sieve Size	Percent by Weight Passing
2 Inch	100
1 Inch	20 – 55
3/8 Inch	0 -5

Breaker Run Stone	
Sieve Size	Percent by Weight Passing
5 Inch	100
1½ Inch	0 – 50
3/8 Inch	0 - 5

Incorporate stone or rock in the ditch checks that is hard, sound, and durable, and meets the approval of the engineer.

#### C Construction

Place stone or rock ditch checks immediately after shaping of the ditches or slopes is completed. Place stone or rock ditch checks at right angles to the direction of flow and construct to the dimensions and in accordance to the details shown in the plans.

Remove sediment from behind the stone or rock ditch checks when it has accumulated to one half of the original height of the dam.

#### D Measurement

The department will measure Stone or Rock Ditch Checks in volume by the cubic yard of material incorporated in the work.

#### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
628.7560.S	Stone or Rock Ditch Checks	CY



Payment is full compensation for furnishing, producing, crushing, loading, hauling, placing, and shaping and maintaining Stone or Rock Ditch Check.

The quantity of sediment removed shall be multiplied by a factor of ten and paid for as Common Excavation.  
628-050 (20140630)

### **36. Furnishing and Planting Plant Materials.**

Perform the work under this item in accordance with the plans, standard spec 632, as shown on the plans, and as hereinafter provided.

*Add the following to standard spec 632.2.1:*

Ensure all plants are grown within the states of Wisconsin, Minnesota, Michigan, or parts of northern Illinois, Indiana or Ohio located within Zone 5 of the "Plant Hardiness Zone Map" produced by the United States Department of Agriculture, Miscellaneous Publication No. 1475, issued January, 1990, unless otherwise approved by the engineer.

*Add the following to standard spec 632.2.8:*

Furnish a list of sources for plants in accordance with standard spec 632.2.2.8 before planting begins for fall-planted plants and before March 15 for spring-planted plants. All sources will be subject to verification by the engineer.

*Add the following to standard spec 632.2.3.4:*

Submit planting mixture for review and approval by the engineer before use on project. The engineer reserves the right to reject planting mixture that does not conform to the specifications and/or does not come with the appropriate material certificates. The engineer may require the contractor to take samples (for USDA soil texture classification, pH, % organic matter, nutrient content, cation exchange capacity, soluble salts, and the presence of any materials deleterious to plant growth) and provide testing through a qualified testing laboratory approved by the State of Wisconsin to confirm that topsoil meets the requirements outlined in standard spec 625.

*Delete standard spec 632.2.4.2 and replace with the following:*

For fertilizer used in plant holes, provide a three-year release, water-soluble fertilizer contained in a micropore slow release polyethylene packet. Ensure each packet contains two ounces of fertilizer. A single 2-ounce packet is considered one unit. Ensure the fertilizer conforms to the following minimum requirements:

Nitrogen, not less than ----- 16%  
Phosphoric Acid, not less than ----- 8%  
Potash, not less than -----8%

For trees: Use a minimum of two units and provide two units per caliper inch of tree trunk diameter. For one-half caliper measurements, round up to the next unit.

For shrubs: Use a minimum of two units and provide one unit per 12 inches of plant height or spread.

For perennials: Use a single unit per plant.

*Delete standard spec 632.2.6 and replace with the following:*

Provide Shredded Hardwood Bark Mulch for mulch rings around the base of plant material that is finely shredded hardwood bark mulch and the product of a mechanical chipper, hammermill, or tub grinder. Ensure the material is fibrous and uniformly dark brown in color, free of large wood chunks, and substantially free of mold, dirt, sawdust, weeds, weed seeds and foreign material. Ensure that no portion of the material is in an advanced state of decomposition. Ensure that the material does not contain chipped up manufactured boards or chemically treated wood, including but not limited to wafer board, particle board, and chromated copper arsenate (CCA) or penta-treated wood. Ensure that the material does not contain bark of the black walnut tree. Ensure that the material, when air dried, all passes a 4-inch screen and no more than 20 percent by mass of the material passes a 0.10-inch sieve. Ensure that unattached bark or greenleaf composition, either singly or combined, does not exceed 20 percent each by mass. The maximum length of individual pieces cannot exceed 4 inches.

Supply source of shredded hardwood bark mulch to the engineer. All sources will be subject to verification and approval by the engineer.

*Delete standard spec 632.2.7 and replace with the following:*

Do not use wrapping on plant material.

*Delete standard spec 632.2.9 and replace with the following:*

Provide rodent protection for single-stem trees of rigid plastic mesh made of recycled HDPE with an open mesh matrix 3/4" by 3/4" with each strand approximately 1/8" x 1/8" x 1/8". Ensure the product is UV treated with a life expectancy of up to 5 years. Ensure product is at least 48 inches high. Supply source of rodent protection to the engineer. All sources will be subject to verification and approval by the engineer. Install rodent protection for single-stem trees according to manufacturer's written instructions, burying the bottom of the rodent protection 2-3 inches into the adjacent soil grades.

Provide rodent protection for multi-stemmed trees of chicken wire or other similarly rigid, matrix-material with an open mesh matrix 3/4" by 3/4" or less, 48 inches high. Supply source of chicken wire to the engineer. All sources will be subject to verification and approval by the engineer. Install rodent protection for multi-stemmed trees such that the entire base of the tree is protected; circumference of rodent protection may vary based on specific

characteristics of each tree. Ensure that the bottom 2-3 inches of the rodent protection is buried into the adjacent soil grades.

Use granular or similar rodent bait for shrub and perennial beds as needed and only as approved by the engineer.

*Delete standard spec 632.2.1, subsection (2) and replace with the following:*

Use 18" long soft polymer webbing strap with grommets at end of the two ends to secure wire or twine to tree. Supply source of webbing straps to the engineer. All sources will be subject to verification and approval by the engineer.

Provide tree stabilization for all trees:

- Planted on slopes greater than 4:1;
- Planted in areas prone to high winds;
- Planted in areas prone to flooding or with seasonally saturated soils;
- At the discretion of the landscape contractor to ensure viable, healthy plantings;
- At the discretion of the engineer.

*Delete standard spec 632.3.1, subsection (1) and replace with the following:*

The normal spring planting season for all plants is up to June 15. The normal fall planting season is September 15 to November 15 or up until the ground is frozen. Ensure the planting of evergreen trees and shrubs, and perennials in the fall is completed by October 15. If the overall construction schedule dictates that planting will occur between June 15 and September 15, obtain approval from the engineer to begin installation outside of the normal planting seasons. If the engineer grants approval of the request, the contractor will also be held fully responsible for any and all additional maintenance associated with planting outside of the normal planting seasons including, but not limited to, supplemental watering above and beyond the typical, specified landscape maintenance and care cycle schedule.

*Add the following to standard spec 632.3.1:*

Take care not to damage or disturb adjacent finished landscape and seed or sod to repair any and all damage caused to adjacent seeded and/or sodded areas.

*Delete standard spec 632.3.3 and replace with the following:*

Stake out locations of all plant holes and obtain approval of staked location from the Engineer before planting.

*Add the following to standard spec 632.3.4:*

Ensure that the bottom of the hole is adequately compacted to guard against settling. Tamp or water in as necessary to create a condition by which plants will not settle in the planting beds. Ensure the bottom of the rootball is in direct contact with the bottom of the hole.

*Add the following to standard spec 632.3.7:*

Remove the burlap and other wrapping materials including, but not limited to, twine, wire baskets, and plastic ribbon, from the entire root ball of B&B plants unless the Engineer determines that removal of said material will be detrimental to plant stability and/or establishment.

*Delete standard spec 632.3.18.1.1 and replace with the following:*

The plant establishment period for this contract is two growing seasons, beginning at the date of substantial completion as established by the Engineer and ending at the end of the established care cycles, no less than two growing seasons later.

*Delete standard spec 632.3.18.1.3.*

*Add the following to standard spec 632.3.19.1:*

Remove all staking, bracing wire material, and other plant stabilization material at the end of the required establishment period.

Remove all rodent protection measures at the end of the required establishment period.

The interval for a care cycle is 10-14 days between May 15 and October 15. There will be 10 required care cycles in a growing season.

Perform a complete and thorough Spring clean-out of all planting beds that contain trees, shrubs, perennials, ornamental grasses and/or bulbs. Perform Spring clean-out during the first care cycle of the year (between April 15 and May 1) or as soon as weather and growing season conditions permit. Do not perform Spring clean-out until the ground is no longer saturated from the spring thaw; walking on saturated soil will result in compaction. Ensure that Spring clean-out includes removal of past-season herbaceous material that was left standing over winter, cutting back ornamental grasses to within 3-inches of the mulched surface, removing any material damaged over the winter by pruning according to the language outlined in standard spec 632, removal of trash or other debris that has accumulated in planting beds, removal of leaves or other plant debris that has accumulated on the top of the mulched surface, replenishing mulch, weeding, and any and all other clean-out and maintenance operations as directed by the engineer or as required to produce an aesthetically pleasing, healthy environment for plant growth.

Perform a complete and thorough Fall clean-out of all planting beds that contain trees, shrubs, perennials, ornamental grasses and/or bulbs. Perform Fall clean-out during the last care cycle of the year (between October 15 and October 31). Do not perform Fall clean-out if the soil is saturated from rain event; wait until the soil moisture levels have gone down before performing the final bed clean-out. Ensure that Fall clean-out includes coordination with the individual municipality's Forester or Parks Manager to determine which

herbaceous perennial and ornamental grass material to leave standing through the winter and which to cut back to the ground, removing any material damaged during the growing season by pruning according to the language outlined in standard spec 632, removal of trash or other debris that has accumulated in planting beds, removal of leaves or other plant debris that has accumulated on the top of the mulched surface, replenishing mulch, weeding, and any and all other clean-out and maintenance operations as directed by the engineer or as required to produce an aesthetically pleasing, healthy environment for plant growth.

Provide supplemental water during the April 15 to October 31 maintenance period as often as necessary to ensure healthy, thriving, and established plant material. Provide supplemental water even if irrigation is installed as part of the project. Coordinate supplemental water directly with the municipality to ensure that the plant material is not being overwatered or under-watered. The contractor will remain solely responsible for plant health and watering maintenance even in the event of irrigation system installation.

Re-mulching of roundabout beds and rings at the base of other tree and shrub material is expected to be performed immediately prior to the end of the two-year proving period. Work is incidental to Landscape Planting Surveillance and Care Cycles bid item. Additional payment for re-mulching will not be granted.

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

If the Landscape Contractor 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 \$1000 per day 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.

### **38. Field Office.**

The work under this item shall be in accordance to the pertinent requirements of standard spec 642 and as hereinafter provided.

*Delete standard spec 642.2.2 and replace with the following:*

Field Office, Type D shall have a minimum interior space of 750 square feet and shall be all or part of an existing commercial building that is located within 1 mile of the project corridor having a parking facility with a minimum capacity of 8 passenger vehicles. The office shall include space for a meeting room that is at least 20 x 20 feet. The meeting room shall be equipped with two 4 x 8 foot tables and at least 10 folding chairs.

The office shall be equipped with the following: Minimum electrical service of 100A and 120 VAC, all rooms shall include a heating, air conditioner or central air conditioning system, an exterior and interior door with locks, five suitable office desks with drawers, seven office chairs, one four-drawer file cabinet, one four-shelf bookcase, two 2.5 x 5 foot

minimum tables and a six-pound or larger fire extinguisher meeting the requirements for classes A, B and C of the NFPA code.

Adequate indoor bathroom facilities shall be located in the building for use by project personnel. The bathroom shall be cleaned weekly, maintained and supplied by building management or the contractor.

Provide the field facility with up to four communication services designated as follows; 2-Voice, 1-Fax, and 1-High speed internet connection for computer(s) at a setting no less than 1 MB and up to 10 MB. The high speed Internet connection must utilize either DHCP or PPPoE as the connection method.

Provide two programmable touch-tone telephones of which one will be a cordless type operating at no less than 2.4 GHz and one will have an answering machine unless voice mail service is available. The telephones and the communication services are for the sole purpose of the department staff.

Provide one new color copier/printer/scanner/fax multifunction machine with duplex capabilities, minimum machines include Lanier LD620c or Canon C2550 or equal. The machine shall have print size of 11" x 17", minimum of two sheet trays that can handle 8-1/2" X 11" or legal size and 11" X 17" paper sources, color output speed of 20 ppm, touch panel controls, scan capabilities to create PDF documents, standard duplex capabilities, minimum of 4MB of memory, minimum print resolution of 2400 dpi x 600 dpi, capable of printing from multiple computers. Included with the copier/printer machine shall be a full service maintenance contract for the entire length of the construction contract which shall include setup as required, any and all maintenance required, and replacement toner as needed.

Provide one complete GPS rover survey unit for use by DOT staff on the project. The system shall be separate from any system used by the contractor so that independent verification, staking, and topographical survey may be completed as needed by the department. The contractor shall supply the complete system including rover unit, batteries, data collector, software, chargers, 2.5m carbon fiber telescopic range pole with bi pod, any needed cords, cellular phone services as needed for the unit for the life of the project, any other miscellaneous equipment needed for a complete unit. Including any software for the rover, controller, data transfer from computer system to the unit as needed by the department. Include training, maintenance and repair contracts for the controller, GPS rover, and any software updates as needed. The unit shall become department property upon completion of the project. The minimum unit as listed below shall be provided. Contractor shall supply specifications of unit and manufacturer prior to delivery with the engineer. Additional equipment or software modifications may be required to system to allow for functionality as required by the supplier or unit provided.

**Minimum unit requirements or equal to be supplied:**

Trimble R10 (R-10-001-60) GNSS system, 410-470 Mhz Radio, Rechargeable, removable 7.4 V, 2.6 Ah Lithium-Ion batteries; communications and data storage; USB v2.0;

Cellular: fully integrated, 3.5 G Modem, 7.2 Mbps download, GPRS Multi Slot Class 12;  
Bluetooth: fully integrated, fully sealed 2.4 GHz communications port (Bluetooth®);  
External communication devices for corrections supported on Serial and Bluetooth ports •  
Data storage: 4 GB internal memory;  
System positioning performance:  
Code Differential: Horizontal: 0.25m + 1ppm RMS, Vertical: 0.50 m + 1ppm RMS  
Static GNSS Survey: High precision static, Horizontal: 3mm + 0.1ppm RMS,  
Vertical: 3.5m m + 0.1ppm RMS  
Real Time Kinematic Surveying: Single baseline and Network RTK, Horizontal: 8mm +  
0.5ppm RMS, Vertical: 15m m + 0.5ppm RMS

Trimble TSC3 controller (43169-20), Trimble TSC3 Accessory GNSS Kit (82768-00),  
ABCD keypad, 256 MB RAM, 8GB internal memory, internal rechargeable Li-ion battery,  
Integrated Bluetooth 2.0 +EDR wireless technology, 3 GB integrated modem, wi-fi  
capability, SCS900 Site Controller Software, Trimble Business Center Complete Edition,  
and Roads Module.

Maintain the field office, equipment and provide fax and copy machine supplies as  
requested by the engineer, including all print cartridges. The field office and all items shall  
be supplied under this contract until December 30, 2017 or completion of the contract  
items.

### **39. General Requirements for Electrical Work.**

*Add the following to standard spec 651.2, Materials:*

- (7) The approved products list is located at:  
<http://www.dot.wisconsin.gov/business/engrserv/docs/ap5/electrical.pdf>

### **40. Electrical Service Meter Breaker Pedestal 359+62B, 32.8'LT, Item 656.0200.001; 416+88C, 37.1'RT, Item 656.0200.002.**

*Delete standard spec 656.3.2, Service Lateral, paragraph (1) and replace with the following:*

- (1) The local utility shall furnish and install a 100 A, 120/240 volt AC, single phase, 3-wire underground electrical service lateral. Arrange and assume responsibility for the timely installation of the service lateral by the utility. The lateral shall be terminated at a meter pedestal as the plans show.
- Ensure that electrical service is installed and energized a minimum of one week prior to the lighting system activation deadline.

## **41. Planting Mixture, Item SPV.0035.400.**

### **A Description**

This special provision describes furnishing and installing Planting Mixture at the locations shown on the plans and in accordance to the requirements of standard spec 632, the plans, and as hereinafter provided.

### **B Materials**

The Landscape Contractor who is responsible for furnishing and installing plant material is also solely responsible for obtaining planting mixture components, blending the mixture to the specified proportions, and for furnishing and installing the planting mixture.

#### **B.1 Planting Mixture**

The planting mixture consists of the following blend by volume:

- 2 parts topsoil. Conform Topsoil to standard spec 625.
- 1 part sand. Obtain the engineer's approval for the sand.
- 1 part compost. Provide compost that is either well-rotted shredded leaf mulch, free of disease; or well-rotted, unleached, stable or cattle manure containing no more than 25 percent by volume of straw, sawdust, or other bedding materials and free of toxic substances. Either that both are free of stones, sticks, soil, weed seeds, debris, and other material harmful to plant growth.
- 1 part peat moss. Conform peat moss to standard spec 632.

### **C Construction**

#### **C.1 Coordination**

Deliver Planting Mixture to project site and installed no more than seven days before the start of planting operations for areas receiving Planting Mixture. Fully coordinate and schedule the delivery and installation of the Planting Mixture with the delivery and installation of all landscape plant materials.

#### **C.2 Planting Mixture Preparation and Placement**

Provide, in writing to the engineer, a list of all materials used in Planting Mixture including manufacturers or suppliers (source) and quantities to ensure that all materials meet the standards set forth in standard specs 625 and 632 and produce a planting mixture that provides a stable, healthy soil for plant growth.

Ensure proper excavation of planting area for all areas to receive Planting Mixture. Prepare areas by removing any construction materials, stone, or other debris larger than 2" in length or diameter for all areas. Remove all debris, slag piles and trash. Ensure that subgrades have been excavated to allow for a minimum 24-inch depth placement of Planting Mixture. Till or disc subgrades to loosen and decompact. Obtain the engineer's approval of subgrade preparation including depth excavated, removal of trash materials, and loosening of subgrades before placing any Planting Mixture.

Provide Planting Mixture for planting beds as indicated in the plans.



Provide Planting Mixture over entire planting bed area and fine grade to match grades as indicated on plans or to adjacent back of curb or other hardscape surface as indicated on plans and account for settling. Place Planting Mixture in 6-inch to 8-inch lifts, watering in or tamping to reduce settling potential. Provide a minimum of 24" depth in all planting beds as indicated in the plans.

Obtain approval of Planting Mixture depths, locations, and elevations by the engineer prior to planting.

**D Measurement**

The department will measure Planting Mixture by the cubic yard, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.400	Planting Mixture	CY

Payment is full compensation for furnishing and installing all materials.

**42. Topsoil Special, Item SPV.0035.401.**

**A Description**

This special provision describes excavating and disposing of material taken from within tree planting locations in accordance to standard spec 205 and furnishing and installing topsoil at the tree planting locations in accordance to the requirements of standard spec 625, the plans, and as hereinafter provided.

**B Materials**

Excavate materials in accordance to standard spec 205. Furnish topsoil materials in accordance to standard spec 625.

**C Construction**

Excavate materials as the plans show or the engineer allows from the tree planting areas in accordance to standard spec 205. Use excavated materials in the work to the extent that it is practical for other approved areas. Dispose of surplus or unsuitable material as specified in standard spec 205.3.12. Place Topsoil Special in accordance to standard spec 625 in locations shown on the plans, and to a minimum depth of 18 inches for trees and 12 inches for shrubs.

**D Measurement**

The department will measure Topsoil Special by the cubic yard of excavated material acceptably removed in accordance to standard spec 205.4.1 and acceptably replaced with topsoil in accordance to standard spec 625.4.1(3).

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.401	Topsoil Special	CY

Payment is full compensation for excavating and disposing of tree planting area materials, and for furnishing and placing all topsoil materials in tree planting areas, including excavating, loading, and hauling.

**43. Removing Billboards, Item SPV.0060.001.****A Description**

This special provision describes removing existing billboards and supports in accordance to the applicable sections standard spec 638 and as hereinafter provided.

**B (Vacant)****C Construction**

Remove the complete billboard unit including signs, supports, footings, ladders, walkways, electrical systems and all appurtenances from the locations designated on the plans. Excavate to remove the footings and provide adequate backfill and compaction of the removal area to eliminate settling. Restore the surface around the location to the same condition as surrounding area and as directed by the engineer.

Billboards with multiple supports and signs at the same location, but not necessarily connected, will be considered one complete unit.

Coordinate with Alliant Energy for disconnection of the power service prior to removal of the billboard and billboard supports.

**D Measurement**

The department will measure Removing Billboards as each individual complete billboard unit removed, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.001	Removing Billboards	Each

Payment is full compensation for removing the signs, supports, footings, ladders, walkways, electrical systems and all appurtenances associated with the billboard; for removal from the project site; for backfilling any necessary areas; coordination with utilities and following utility and OSHA removal requirements. Removed items are property of the contractor.

#### 44. Settlement Gauges, Item SPV.0060.002.

##### **A Description**

This special provision describes furnishing and installing settlement gauges and extensions in accordance to the details shown in the plans and as herein provided.

##### **B Materials**

A 0.5-inch thick steel plate, 24 inches square in size, placed upon a minimum of 1 inch thick mortar leveling course, and with a 1-1/2 inch steel riser pipe that is welded in position perpendicular to the plate at its center.

Sections of 1-1/2 inch diameter standard threaded galvanized steel riser pipe welded to the base plate and extended progressively upward at a vertical plumbness as embankment fill is placed and compacted. A 1-1/2 inch standard galvanized steel cap shall be attached to the threaded inner riser pipe as a survey reference member, and progressively removed and extended upward as each new section of riser pipe and external sleeve are added due to fill.

Sections of 3-inch diameter standard threaded steel pipe or threaded PVC pipe sleeve initially placed with a 2-foot separation from the base plate and then extended progressively upward encompassing the 1-1/2 inch pipe with the internal annulus filled with grease to promote free sliding between sleeve and internal pipe. This sleeve is intended to be continuous so as to prevent embankment soils from coming in contact with the internal riser pipe over the length of sleeve to the surface as progressive lifts of fill are placed.

##### **C Construction**

Install the settlement gauges at field locations as determined by the engineer and under the supervision of the department's Geotechnical Unit and at the following locations:

Point No.	Feature	Station	Off set
EB1	Embankment	514+95.15 EB	70' LT
EB3	Embankment	518+95.15 EB	40' RT
EB4	Embankment	519+95.15 EB	40' RT
EB6	Embankment	522+95.15 EB	45' RT
EB9	Embankment	503+88.22 EB	40' RT
EB10	Embankment	507+91.08 EB	70' LT

Initially install settlement gauges subsequent to the excavation and backfilling of the marsh and prior to the placement of the embankment fill.

The bottom of the plate shall be level and riser pipe shall be vertical. Mortar may be used to level the 2-foot x 2-foot x 0.5-inch thick plate. Determine the elevation of the plate and the lengths of any added riser pipe(s) to a measured accuracy of 0.02 feet (GPS vertical measurement is not acceptable) and record and transmit the information to the engineer.

Position and weld the initial 1-1/2 inch diameter threaded galvanized steel riser pipe perpendicular to the steel settlement plate with a fillet weld.

Place end cap, consisting of 1-1/2 inch standard galvanized steel, at the top of the riser pipe for purposes as a survey reference point.

Obtain the first measured readings of the settlement plate and end cap.

Place embankment fill as indicated.

As soon as embankment soils achieve 2 feet of cover over the steel settlement plate, position a 3-inch diameter sleeve loosely around the smaller diameter riser pipe to isolate and protect the inner pipe for subsequent readings.

Fill the inner annulus between steel pipe and outer sleeve with sufficient lubricant grease to prevent rust from occurring and resulting in binding of the inner pipe to the outer sleeve.

Progressively add both inner riser pipe and outer sleeve pipe in section increments of 5.0 feet (or other calibrated and measured increments) as embankment fill is continued to be placed, always transferring the end cap to the newest riser pipe top, and always obtaining new elevation readings at each time of extension addition.

Provide updated elevation readings at the end of each day's activities to the engineer.

No embankment fill shall be placed around settlement gauges until the elevation of the top of the new riser section has been determined by the contractor's surveyor.

Embankment material in the vicinity of the riser pipe shall be compacted to specification requirements, taking precautions to keep alignment of the riser and the cover pipes vertical at all times.

Take all necessary precautions to ensure that the settlement gauges are not damaged, displaced, or misaligned. If a gauge is damaged, it shall immediately be repaired or replaced by the contractor at this/her own expense. Contractor to protect and maintain all settlement gauges installed as part of this contract.

#### **D Measurement**

The department will measure Settlement Gauges as each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.002	Settlement Gauges	Each

Payment is full compensation for furnishing and placing all materials including extensions; for excavation.

#### 45. **Vibrating Wire Piezometer Instrumentation System, Delivered, Item SPV.0060.003.**

**A Description**

This special provision describes furnishing and delivering a vibrating wire piezometer instrumentation system a minimum of 21 days prior to start of placing embankments. It also includes providing a technical assistance representative from the company to aid in piezometer installation and to provide on-site technical support. Perform all according to the plans and as provided herein.

**B Materials**

Materials for the vibrating wire piezometer system shall include eight vibrating wire piezometers, one data recorder, two terminal boxes, and necessary appurtenances.

Vibrating Wire Piezometers: A total of eight vibrating wire piezometers shall be Geokon Model 4500S, 100 psi range (Geokon Incorporated, 48 Spencer Street, Lebanon, NH 03766, (603) 448-1562) or Slope Indicator Part Number 52611030 (Slope Indicator Company, 316 Forsyth Street, Raleigh, NC 27609-6314, (800) 929-4712), or an approved equal.

Each vibrating wire piezometer shall meet the following specifications:

Pressure Range (psi):	0-100
Over Range/Maximum Pressure:	2X rated pressure range
Resolution:	0.025% full scale (F.S.) minimum
Accuracy:	±0.1% of F.S.
Operating Temperature:	-20 °F to 150 °F
Thermal Zero Shift:	<0.05% F.S./°C or <0.04 psi/°C
Cable:	Four conductor, 20 or 22 gauge shielded cable with polyethylene jacket or an approved equal, connection between cable and instrument factory sealed (see table below for required length of cable)
Filter:	50 micron sintered stainless steel
Diameter of piezometer:	≈ 0.75 inches

Provide a canvas bag, 2 1/2-inch by 18-inch, with each piezometer.

Calibrate all piezometers at the factory. Make calibrations while pressure is both increasing and decreasing for at least two cycles, to document hysteresis throughout the maximum range of the instrument. Take readings at a minimum number of eight equal increments, and require the manufacturer to supply a calibration curve with data points clearly indicated, and a tabulation of the data. Use the data recorder that is to be supplied under this item number during the factory calibrations. Make readings at a sufficient number of different temperatures which range from -20 °F to 120 °F to provide a calibration curve, and substantiate it, indicating the effect of temperature change on the instruments. Mark each piezometer with a unique identification number.

Signal cables and mechanical waterproof seals between the cable and the piezometer for each of the vibrating wire piezometers shall be factory installed. No splices shall be allowed. All cables shall be terminated with connectors compatible with terminal boxes furnished under this item. The required cable lengths shall be determined to extend from the tip of the piezometers to the ground level to the location of the readout box.

<b>Point No.</b>	<b>Feature</b>	<b>Station</b>	<b>Off set</b>	<b>Estimated Tip Elev.</b>
EB1	Embankment	514+95.15 EB	70' LT	972 feet
EB2	Embankment	514+95.15 EB	115' LT	960 feet
EB3	Embankment	518+95.15 EB	40' RT	970 feet
EB4	Embankment	519+95.15 EB	40' RT	992 feet
EB5	Embankment	519+95.15 EB	105' RT	965 feet
EB6	Embankment	522+95.15 EB	45' RT	992 feet
EB7	Embankment	522+95.15 EB	125' RT	975 feet
EB8	Embankment	524+95.15 EB	135' RT	980 feet

Data Recorder: The data recorder shall include a battery charger, adaptors, and cables necessary for field operation, and the computer software required for downloading the data to an IBM compatible personal computer. The software shall also be capable of generating reports and annotated graphs from the data. Acceptable readout and data loggers include Geokon Model GK-403 (Portable Readout Unit and SPLIT Data Formatting Software), Slope Indicator Part Numbers 52620900 AND 52620920 (VS Datamate and Datamate Manager Software), or an approved equal.

The data recorder shall have waterproof seals incorporated into its face plate, switches and input connectors. It shall have a backup power source or battery which will keep data secure if the main battery should become discharged. It shall have the capacity of manually recording a minimum of 250 readings, and of automatically recording data at any interval specified and entering a low power mode between the readings taken. It shall have the electronic transfer capability of linking itself and a personal computer for data transfer. Include an interface cable. It shall be able to do the following: display battery charge, display internal temperature and humidity, set date and time, display all data in its

memory, and adjust viewing angle of display. It shall have a backlit display. It shall be able to display pore water pressure readings in standard English and metric units of pressure, and temperature readings in degrees Celsius and degrees Fahrenheit.

The data recorder shall also meet the following specifications:

Temperature Range:	Fully operable from -4 °F to 120 °F
Excitation Range:	450 - 6000 Hz
Resolution:	0.01% Full Scale
Weight :	~ 12 lb

Two Terminal Boxes: Acceptable terminal boxes shall be Geokon Terminal Box Model 4999, Slope Indicator Terminal Box 57711600, or an approved equal. The terminal box enclosures shall be constructed of baked enamel coated steel or fibreglass, and shall be waterproof. Each box shall handle a minimum of six 4-conductor sensors. Cable entries on each box shall have watertight cable glands fixed in place with strain reliefs. The boxes shall be modified as necessary to permit connection to the data recorder. Protect each terminal box from lightning damage by installing at the factory surge arrestors, and with a ground rod and grounding cable.

Furnish the engineer for approval, a minimum of 14 days prior to delivery of the vibrating wire piezometer instrumentation system to the site, the following:

1. Name and phone number of manufacturer's designated technical assistance representative,
2. Manufacturer's certifications for all components of the system,
3. Factory calibration certifications for all components of the system,
4. Factory quality assurance checklist,
5. Factory preshipment inspection checklist,
6. Factory warranties for all components of the system,
7. Shipping documents and shipping schedule,
8. Unique instrument identification numbers for all components, and
9. Instruction manuals for each component of the system supplied by the manufacturer.
10. The location of the readout boxes for the individual areas.

Include a comprehensive instruction manual with the vibrating wire piezometer instrumentation system. It shall contain the following: (1) *theory of operation*, i.e. the basic measuring principle of the instrument with appropriate illustrations, limitations of the instrument, factors which may affect measurement uncertainty, and a specification sheet; (2) *calibration procedures*, i.e. step-by-step acceptance test procedures to ensure correct functioning when the instrument is first received, procedures for performing calibration checks, and procedures for regular calibration of the readout and data logger; (3) *installation procedures*, i.e. step-by-step procedure for installation, with illustrations of the system and its components, showing correct juxtaposition when installed, and statement of all factors that should be recorded during installation for later use during data evaluation; (4) *maintenance procedures and trouble-shooting guide* with names, addresses, and telephone numbers of instrument service representatives; (5) *data collection*

*procedures*, i.e. cautions pertaining to personnel and equipment, procedure for obtaining initial reading, procedure for obtaining readings subsequent to initial readings, listing of equipment and tools required during instrument reading, a field data sheet, and a sample completed field data sheet; and (6) *data processing, presentation, and interpretation procedures*, i.e. data calculation sheet, step-by-step calculation procedure, instruction manual(s) for software supplied by the manufacturer, sample data calculations, alternative methods of plotting the data, sample data plots, and notes on data interpretation.

There shall be a product warranty on all parts of the vibrating wire piezometer instrumentation system of a minimum of one year from the date of delivery to the department against defects in materials and workmanship.

All components of the Vibrating Wire Piezometer Instrumentation System shall be made by the same manufacturer. Each component of the Vibrating Wire Piezometer Instrumentation System shall bear markings to clearly identify it with the manufacturer's certifications previously furnished to the engineer. The term *approved equal* shall be understood to indicate that the *equal* product shall meet all of the specifications, and shall be the same or superior to the products named previously in the specifications in function, performance, accuracy, tolerances, and general configuration. The engineer shall make the final determination if the approved equal is acceptable. Components which do not meet the requirements of the specifications shall be unacceptable and will be rejected by the engineer. The engineer reserves the right to prohibit delivery of any component until certifications provided by the manufacturer, and supplied by the contractor, indicates full compliance with the specifications.

Technical Support: Make available an on-site technical assistance representative from the manufacturer which supplies the Vibrating Wire Piezometer Instrumentation System to instruct the contractor on how to install the first vibrating wire piezometer installed on the project. Also make available on-site the technical assistance representative to assist in the final connections of the vibrating wire piezometer cables to the terminal boxes during construction operations and to assist in initial calibration and reading of the instrumentation.

Notify the Foundation and Pavement Unit of the delivery of the vibrating wire piezometer instrumentation system a minimum of 14 days prior to its arrival. Deliver the Vibrating Wire Piezometer Instrumentation System to the Bureau of Highway Construction, c/o Foundation and Pavement Unit, 3502 Kinsman Boulevard, Madison, WI 53704. Upon delivery, the data recorder with its appurtenances becomes the property of the department. Upon completion of the project, ownership of the data recorder with its appurtenances becomes the property of the Foundation and Pavement Unit Section.

## **C (Vacant)**

## **D Measurement**

The department will measure Vibrating Wire Piezometer Instrumentation System Delivered as each individual unit, acceptably completed.



### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.003	Vibrating Wire Piezometer Instrumentation System Delivered	Each

Payment is full compensation for furnishing and delivering all components of the Vibrating Wire Piezometer Instrumentation System for the project, and for providing technical support at the project site.

## **46. Pavement Marking Grooved Contrast Preformed Thermoplastic Arrows Type 1, Item SPV.0060.300; Arrows Type 3R, Item SPV.0060.301; Arrows Type 3, Item SPV.0060.302; Words, Item SPV.0060.303.**

### **A Description**

This special provision describes grooving the pavement surface, and furnishing and installing contrast preformed thermoplastic pavement marking as shown on the plans, in accordance to standard spec 647, and as hereinafter provided.

### **B Materials**

Furnish 125 mils preformed thermoplastic pavement marking from the department's approved products list. If required, furnish sealant material recommended by the manufacturer.

### **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 preformed thermoplastic pavement marking.

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

#### **C.2 Groove Depth**

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

#### **C.3 Groove Width – Linear Markings**

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

#### **C.4 Groove Position**

Position the groove edge in accordance to the plan details.

#### **C.4.1 Linear Marking**

Groove at a minimum of 4-inches, but not greater than, 12-inches from both ends of the line segment. Achieve straight alignment with the grooving equipment.

#### **C.4.2 Special Marking**

Groove at a minimum of 4-inches from the perimeter of the special marking. Groove separate areas for Word Items.

### **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 sealant, and placement of the pavement marking. Use a high-pressure air blower with at least 185 ft<sup>3</sup>/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 Asphalt**

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

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

### **C.6 Preformed Thermoplastic Application**

Preheat the surface if necessary based on manufacturer's recommendation.

Apply preformed thermoplastic in the groove as per manufacturer's recommendations. If manufacturer's recommendations require a sealant, apply a sealant 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 sealant in the remainder counties and for the remainder of the year. The sealant must be wet.

#### **D Measurement**

The department will measure Pavement Marking Contrast Grooved Preformed Thermoplastic (Arrow Type/Words) as each individual pavement marking contrast grooved preformed thermoplastic (arrow type/words), 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.0060.300	Pavement Marking Contrast Grooved Preformed Thermoplastic Arrows Type 1	Each
SPV.0060.301	Pavement Marking Contrast Grooved Preformed Thermoplastic Arrows Type 3R	Each
SPV.0060.302	Pavement Marking Contrast Grooved Preformed Thermoplastic Arrows Type 3	Each
SPV.0060.303	Pavement Marking Contrast Grooved Preformed Thermoplastic Words	Each

Payment is full compensation for cleaning and preparing the pavement surface, furnishing and installing the material.

- 47. Aster, Smooth (Sky Blue), CG, 1 Gal., Item SPV.0060.400; Bee Balm (Marshall's Delight), CG, 1 Gal., Item SPV.0060.401; Black-eyed Susan, CG, 1 Gal., Item SPV.0060.402; Blue Grama, Pot, 4-Inch, Item SPV.0060.403; Coneflower, Purple, CG, 1 Gal., Item SPV.0060.404; Little Bluestem (The Blues), CG, 1 Gal., Item SPV.0060.405; Switchgrass (Northwind), CG, 1 Gal., Item SPV.0060.406; Switchgrass, (Ruby Ribbons), CG, 1 Gal., Item SPV.0060.407.**

#### **A Description**

This special provision describes furnishing and installing perennial plants at the locations shown on the plans and in accordance to the requirements of standard spec 632, the plans, and as hereinafter provided.

#### **B Materials**

Provide perennial plants, as shown on plan, and complying with American Standard for Nursery Stock (ANSI Z60.1-2004) for type, shape, and height.

#### **Plant Materials**

Ensure all plants have been grown within the states of Wisconsin, Minnesota, Michigan, or parts of northern Illinois, Indiana or Ohio located within Zone 5 of the "Plant Hardiness Zone Map" produced by the United States Department of Agriculture, Miscellaneous Publication No. 1475, issued January 1990, unless otherwise approved by the engineer.

Furnish a list of sources for plants in accordance to standard spec 632.2.2.8 before planting begins for fall-planted plants and before March 15 for spring-planted plants. All sources will be subject to verification by the engineer.

Provide type B fertilizer in accordance to standard spec 632.

### **C Construction**

Ensure that Planting Mixture has been placed according to specifications.

Perennials shall be planted approximately 2'-0" on center within the central island of the roundabout. Perennials shall be randomly mixed; the two Switch Grass species in the Plant Data Table should be predominantly located in the upper 2/3 of the roundabout toward the center or high point.

Do not plant perennials directly next to tree trunks; hold perennials away from the trunk of trees a minimum of 4'-0" in all directions.

Excavate planting hole, taking care not to compact or otherwise compromise the Planting Mixture. Ensure that the bottom of the hole is adequately compacted to guard against settling. Tamp or water in as necessary to create a condition by which plants will not settle in the planting beds. Ensure the bottom of the root ball is in direct contact with the bottom of the hole.

Install Perennials with the top of the rootmass level with or slightly above adjacent Planting Mixture levels. Gently backfill with Planting Mixture and lightly press to ensure Perennial is firmly planted.

Keep Shredded Hardwood Bark Mulch 2-3 inches away from the base of each perennial.

### **D Measurement**

The department will measure Perennials (Type) 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.0060.400	Aster, Smooth (Blue Sky), CG, 1 Gal.	Each
SPV.0060.401	Bee Balm (Marshall's Delight), CG, 1 Gal.	Each
SPV.0060.402	Black-eyed Susan, CG, 1 Gal.	Each
SPV.0060.403	Blue Grama, Pot, 4-Inch	Each
SPV.0060.404	Coneflower, Purple, CG, 1 Gal.	Each
SPV.0060.405	Little Bluestem, (The Blues), CG, 1 Gal.	Each
SPV.0060.406	Switch Grass (Northwind), CG, 1 Gal.	Each
SPV.0060.407	Switch Grass (Ruby Ribbons), CG, 1 Gal.	Each

Payment for Perennials bid item are full compensation for providing, transporting, handling, storing, pruning, placing, and replacing plant materials; for excavating all plant holes, salvaging topsoil, mixing, and backfilling; for providing and applying all required fertilizer, mulch, and water; and for disposing of all excess and waste materials. Payment for Planting Mixture and Shredded Hardwood Bark Mulch will be as specified in these Special Provisions and paid for under their respective bid items.

**48. Fabricated Rock Enclosure, Type A, Item SPV.0060.408; Fabricated Rock Enclosure, Type B, Item SPV.0060.409; Fabricated Rock Enclosure, Type C, Item SPV.0060.410.**

**A Description**

This special provision describes furnishing and installing Fabricated Rock Enclosure manufactured by DekoRRA Products, (888) 635-8585, Artificial Rocks Factory, (805) 766-9797, D.C. Works, Inc, (847) 464-4280, or approved equal, at the locations shown on the plans and as hereinafter provided.

**B Materials**

Fabricated Rock Enclosure, Type A:

Type: Artificial rock enclosure with secure anchor holes fabricated into the body of the stone; fabricated by rotationally molding linear low-density polyethylene (LLDPE) powder. Material shall simulate natural stone and color and texture shall be part of the molded material. Hollow (non-solid) mass. Painted color and texture will not be accepted.

Color: Brown granite with black undertones. Engineer shall select final color from manufacturer's standard range prior to Contractor placing order. Shape: Semi-Rounded.

Size: 56" length x 42" width x 30" height.

Weight: 28 lbs.

Strength: Must be able to withstand a minimum of 100 lbs/sf.

Quantity: As indicated in plans.

Fabricated Rock Enclosure, Type B:

Type: Artificial rock enclosure with secure anchor holes fabricated into the body of the stone; fabricated by rotationally molding linear low-density polyethylene (LLDPE) powder. Material shall simulate natural stone and color and texture shall be part of the molded material. Hollow (non-solid) mass. Painted color and texture will not be accepted.

Color: Brown granite with black undertones. Engineer shall select final color from manufacturer's standard range prior to Contractor placing order.

Shape: Semi-Angular.

Size: 60" length x 48" width x 41" height.

Weight: 39 lbs.

Strength: Must be able to withstand a minimum of 100 lbs/sf.

Quantity: As indicated in plans.

#### Fabricated Rock Enclosure, Type C:

Type: Artificial rock enclosure with secure anchor holes fabricated into the body of the stone; fabricated by rotationally molding linear low-density polyethylene (LLDPE) powder. Material shall simulate natural stone and color and texture shall be part of the molded material. Hollow (non-solid) mass. Painted color and texture will not be accepted.

Color: Brown granite with black undertones. Engineer shall select final color from manufacturer's standard range prior to Contractor placing order.

Shape: Semi-Angular.

Size: 48" length x 20" width x 30" height.

Weight: 21 lbs.

Strength: Must be able to withstand a minimum of 100 lbs/sf.

Quantity: As indicated in plans.

#### **C Construction**

Prior to ordering the Fabricated Rock Enclosures, furnish manufacturer's brochure indicating which models are intended to be used for the project. Indicate manufacturer's standard color selection options. Obtain approval of Fabricated Rock Enclosure sizes and color selection by the Engineer before ordering or delivery to the project site.

Fabricated Rock Enclosures not conforming to the parameters for shape, size and weight will be rejected unless a suitable alternative is proposed by the Contractor and accepted by the engineer.

Install Fabricated Rock Enclosure per manufacturer's written recommendations. Bury base of enclosures 3-4 inches below grade and anchor with manufacturer-provided heavy-duty stakes. Place Planting Mixture around the remainder of the base of the fabricated enclosure to bring it up to grade and finish the adjacent surface with plantings and Shredded Hardwood Bark Mulch.

Repair excavations from fabricated rock enclosure placement with additional Planting Mixture to finish level with adjacent grades.

#### **D Measurement**

The department will measure Fabricated Rock Enclosures as each unit, acceptably completed at each separate roundabout.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.408	Fabricated Rock Enclosure, Type A	Each
SPV.0060.409	Fabricated Rock Enclosure, Type B	Each
SPV.0060.410	Fabricated Rock Enclosure, Type C	Each

Payment for Fabricated Rock Enclosure bid item is full compensation for providing, transporting, handling, storing, placing, and repairing areas adjacent to rock enclosures; for excavating all holes; and for disposing of all excess and waste materials. Payment for Planting Mixture, Perennials (type), and Shredded Hardwood Bark Mulch will be as specified in these Special Provisions and paid for under their respective bid items.

#### **49. Precast Concrete Panels, Item SPV.0060.416.**

##### **A Description**

Work includes fabrication, staining and installation of precast concrete panels.

Design units to withstand dead and live loads, applicable snow load, erection forces, and other loads in accordance to AASHTO.

Submit three copies of shop drawings to the engineer for approval prior to fabrication of the precast concrete panels. Shop drawings shall indicate layout, configuration, dimensions, identification marks, reinforcement, connection details, lifting devices, and relationship to adjacent materials. Submit sample of each type of unit illustrating surface finish, staining, and texture.

Manufacturer shall have minimum 5 years of continuous successful experience in fabricating precast concrete materials in compliance with Precast concrete Institute standards.

Installer shall have minimum 5 years successful experience in handling and installing precast concrete panels on projects of comparable size and scope.

Provide protective coverings and temporary lateral support to prevent damage during shipping. Blocking and supports shall be clean, nonstaining, and shall not cause harm to exposed surfaces.

Store precast concrete panels under cover, off the ground, away from areas subject to high humidity conditions. Where extended on-site storage is necessary, provide nonstaining wood cribbing between stacked units to promote air circulation and prevent condensation.

Replace units showing crazes, chips, cracks, disintegration, discoloration, or other defects when units are wet or dry, due to inadequate quality or faulty erection, with new units at no cost to the department, within one year of project substantial completion.

##### **B Materials**

(1) Cement: ASTM C 150, Portland, Type 1 or III, white grey.

(2) Fine Aggregate: ASTM C 33, graded and washed natural gravel crushed, graded limestone; gradation required to attain indicated texture and finish.

- (3) Coarse Aggregate: Coarse Aggregate: ASTM C 33, graded and washed natural gravel crushed, graded limestone; gradation required to attain indicated texture and finish.
- (4) Color Pigments: ASTM C979, inorganic iron oxide pigments, lime-proof. Cement grade carbon black pigment is not acceptable.
- (5) Reinforcing: ASTM A 615, Grade 60, galvanized where embedment is less than 2 inches for No. 5 bars or greater; 1-1/2 inches for #4 bars or smaller.
- (6) Steel Wire Reinforcement: ASTM A 82.
- (7) Welded Wire Fabric: Comply with ASTM A 185 or ASTM A 497, where applicable.
- (8) Steel Bar or Rod Mat Reinforcement: Comply with ASTM A 184, where applicable.
- (9) Admixtures: Comply with ASTM C 494.
- (10) Water: Potable, free of impurities.
- (11) Air Entrainment: Comply with ASTM C 260. Wet-cast mixtures shall contain between 5-7% air entrainment where surfaces are exposed to freeze-thaw conditions.
- (12) Mortar shall be as specified in 519.2.4 of the Standard Special Provisions.
- (13) Connecting and supporting devices shall be Type 304 or 316 stainless steel.
- (14) Bolts, nuts, and washers shall be Type 304 stainless steel.
- (15) Setting buttons, shims, and sheet shall be lead or resilient plastic, nonstaining, thickness to suit joint thickness.

### **C Fabrication**

Factory fabrication shall comply with Precast Concrete Institute recommended fabricating practices for precast panels.

Comply with tolerances as follows:

- (1) Height and Width: Plus 1/16-inch; minus 1/8-inch.
- (2) Lengths: Plus or minus 1/8 inch.

Match color and texture to approved samples, when viewed in direct daylight at a 20-foot distance.



Precast concrete manufacturer is responsible for preparing design mix to attain compressive strength of 6,500 psi at 28 days.

Water absorption shall be maximum 6 percent by dry weight.

Place reinforcing according to industry standards for safe handling, settling, and structural requirements, and as indicated on approved shop drawings.

After manufacturing, cure all dry-tamped precast concrete minimum of 8 hours in a totally enclosed curing room at 85°F and 100% relative humidity; then steam cure for minimum 10 hours.

For new design mixes, take daily test cylinders and test in-house, using a certified technician, at 20 hours, and 28 days after manufacture to ensure compliance with minimum compressive strength requirements. Precast concrete manufacturer will not be required to re-test previous tested and used standard design mixes.

Maintain consistent quality during manufacture.

Ensure exposed-to-view finish surfaces are uniform in color and appearance.

#### **D Construction**

Examine surfaces to receive precast concrete panels and verify that anchors, devices, and openings are ready to receive work of this section. Do not proceed with installation until surfaces and conditions meet requirements for acceptable installation.

Install/set all units and accessories accurately, using skilled, experienced personnel, according to approved shop and setting drawings.

Clean precast concrete panel surfaces before setting, using only water or mild cleaning compounds containing no caustic or abrasives.

Drench all precast concrete panels thoroughly with water just before setting.

Where an open cavity is indicated between precast concrete panel and backup material, keep cavity free of mortar and grout.

Install anchors, supports, fasteners, and other attachments indicated or necessary to secure precast concrete panel in place. Attach anchors securely to precast concrete panel and to supporting surfaces. Place anchors and dowels firmly and fill holes with mortar or nonshrink grout.

Set precast concrete panels accurately, in locations indicated, with uniform joints of dimensions indicated, and with edges and faces aligned according to established relationships.

Set precast concrete panels supported on solid structural members on setting buttons, shims, or sheets, or a combination of setting buttons, and mortar.

After setting each stone, sponge off mortar smears and splashes.

Set precast concrete panels with unfilled vertical joints. After setting, install backer rod, prime ends, and caulk.

Remove and replace work that is broken, chipped, stained, or otherwise damaged; work that does not match approved samples or approved mock-up; and work containing defective joints. Replace unacceptable materials in accordance to the precast concrete manufacturer, leaving no visible evidence of replacement.

Perform final cleaning as soon as possible after mortar has set and been tooled. Use no wire brushes, acid-type cleaning agents, cleaning compounds with caustic or harsh fillers, or other materials or methods which could damage, discoloration, etching of surfaces or joints, without written approval from precast concrete manufacturer.

Protect work from staining or damage to finished surfaces by on-going construction, until acceptance by the department.

#### **E Measurement**

The department will measure Precast Concrete Panel as each individual unit, acceptably completed.

#### **F Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.416	Precast Concrete Panel	Each

Payment is full compensation for furnishing and installing all materials for precast concrete panels, completed in every detail, and for staining.

- 50. Fire Hydrant, Item SPV.0060.450; Water Valve and Box 6-Inch, Item SPV.0060.451; Water Valve and Box 8-Inch, Item SPV.0060.452; Water Valve and Box 12-Inch, Item SPV.0060.453; Tee 12-Inch x 6-Inch, Item SPV.0060.454; Tee 12-Inch x 8-Inch, Item SPV.0060.455; Tee 12-Inch x 12-Inch, Item SPV.0060.456; Tee 8-Inch x 6-Inch, Item SPV.0060.457; Bend 8-Inch, Item SPV.0060.458; Bend 12-Inch, Item SPV.0060.459; Plug 8-Inch, Item SPV.0060.460; Plug 12-Inch, Item SPV.0060.461; Reducer 12-Inch x 6-Inch, Item SPV.0060.462.**

**A Description**

This special provision describes furnishing and installing fire hydrants, water valves and boxes, watermain tees, watermain bends, watermain plugs, and watermain reducers, as shown on the plans, in accordance to the pertinent provisions of standard spec 607, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B (Vacant)****C (Vacant)****D Measurement**

The department will measure Fire Hydrant, Water Valve and Box 6-Inch, Water Valve and Box 8-Inch, Water Valve and Box 12-Inch, Tee 12 Inch x 6 Inch, Tee 12 Inch x 8 Inch, Tee 12 Inch x 12 Inch, Tee 8 Inch x 6 Inch, Bend 8-Inch, Bend 12-Inch, Plug 8-Inch, Plug 12-Inch, and Reducer 12 Inch x 6 Inch, by each individual unit, 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.0060.450	Fire Hydrant	Each
SPV.0060.451	Water Valve and Box 6-Inch	Each
SPV.0060.452	Water Valve and Box 8-Inch	Each
SPV.0060.453	Water Valve and Box 12-Inch	Each
SPV.0060.454	Tee 12 Inch x 6 Inch	Each
SPV.0060.455	Tee 12 Inch x 8 Inch	Each
SPV.0060.456	Tee 12 Inch x 12 Inch	Each
SPV.0060.457	Tee 8 Inch x 6 Inch	Each
SPV.0060.458	Bend 8 Inch	Each
SPV.0060.459	Bend 12 Inch	Each
SPV.0060.460	Plug 8 Inch	Each
SPV.0060.461	Plug 12 Inch	Each
SPV.0060.462	Reducer 12 Inch x 6 Inch	Each

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for excavating, bedding materials, backfilling, fittings, reaction blocking and joint restraint.

**51. 1-Inch Corporation, Curb Stop, and Box Item SPV.0060.463.****A Description**

This special provision describes furnishing and installing 1-inch corporation stop, curb stop and curb box for water service lines, as shown on the plans, in accordance to the pertinent provisions of standard spec 607, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B (Vacant)**

**C (Vacant)**

**D Measurement**

The department will measure 1-Inch Corporation, Curb Stop and Box, by each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.463	1-inch Corporation, Curb Stop and Box	Each

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work and for excavating, bedding materials, backfilling, fittings, and blocking.

**52. Connect to Existing Water Main, Item SPV.0060.464.**

**A Description**

This special provision describes connecting new water main to existing water main, as shown on the plans, conforming to the requirements in the separate special provision entitled "General Requirements for Sanitary Sewer and Water", and as hereinafter provided.

**B Materials**

Provide fittings and joint restraint for the connection to the existing water main.

**C Construction**

Saw and remove existing watermain as necessary to install the new connection.

**D Measurement**

The department will measure Connect to Existing Water Main, by each individual unit, 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.0060.464	Connect to Existing Water Main	Each

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for excavating, bedding materials, backfilling, granular backfill materials, compaction, fittings, reaction blocking, and joint restraint. Reducer 12-inch x 6-inch shall be paid for separately.

### **53. Removing Fire Hydrant, Item SPV.0060.465.**

#### **A Description**

This special provision describes removing existing fire hydrant, as shown on the plans, in accordance to the pertinent provisions of standard spec 204, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

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

#### **C Construction**

Remove existing fire hydrant and lead in a manner that will prevent damage to the unit. Deliver removed fire hydrant to the Village of West Baraboo storage area.

#### **D Measurement**

The department will measure Removing Fire Hydrant by each individual unit, 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.0060.465	Removing Fire Hydrant	Each

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work and for excavating, removing, salvaging, backfilling, compaction and transport to Village storage area.

### **54. Removing Valve and Box, Item SPV.0060.466.**

#### **A Description**

This special provision describes removing existing watermain valve and box, as shown on the plans, in accordance to the pertinent provisions of standard spec 204, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

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

#### **C Construction**

Remove existing water valve, valve box, valve box adaptor, and adjacent watermain tee in a manner that will prevent damage to the components. Deliver removed water valve, valve box, and valve box adaptor to the Village of West Baraboo storage area.

#### **D Measurement**

The department will measure Removing Valve and Box, by each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.466	Removing Valve and Box	Each

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for excavating, removing, salvaging, backfilling, compaction and transport to Village storage area.

**55. Removing Existing Curb Stop and Box, Item SPV.0060.467.****A Description**

This special provision describes removing existing watermain curb stop and box, as shown on the plans, in accordance to the pertinent provisions of standard spec 204, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B (Vacant)****C Construction**

Remove existing curb stop and box. If the curb stop is connected to an existing copper service line that will not be removed, crimp, plug, or cap the open end of the copper service line before backfilling the excavation.

**D Measurement**

The department will measure Removing Existing Curb Stop and Box, by each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.467	Removing Existing Curb Stop and Box	Each

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for excavating, removing, backfilling, compaction and transport to village storage area.

**56. Abandon Existing Water Main, Item SPV.0060.468.****A Description**

This special provision describes abandoning existing water main, as shown on the plans, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B Materials**

Provide a mechanical joint cap for each location that is to be abandoned.

**C Construction**

Cut clean the end of the existing pipe that is to be abandoned. Install the mechanical joint cap.

**D Measurement**

The department will measure Abandoning Existing Water Main, by each individual unit, 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.0060.468	Abandon Existing Water Main	Each

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for excavating, backfilling, mechanical joint cap, and compaction.

**57. Sanitary Sewer Wye 8x6 Inch, Item SPV.0060.469; Sanitary Sewer Plug SDR 35 8-Inch, Item SPV.0060.470.**

**A Description**

This special provision describes sanitary sewer wye 8x6-inch and sanitary sewer plug 8-inch as shown on the plans, in accordance to the pertinent provisions of standard spec 607, conforming to the requirements in the separate special provision entitled "General Requirements for Sanitary Sewer and Water", and as hereinafter provided.

**B (Vacant)****C (Vacant)****D Measurement**

The department will measure Sanitary Sewer Wye 8x6 Inch and Sanitary Sewer Plug SDR 35 8-Inch, by each individual unit, 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.0060.469	Sanitary Sewer Wye 8x6 Inch	Each
SPV.0060.470	Sanitary Sewer Plug SDR 35 8-Inch	Each

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work. 6-inch end cap shall be included in the contract price bid where no lateral is required.

**58. Tracer Wire Termination Box, Item SPV.0060.471.**

**A Description**

This special provision describes furnishing and installing tracer wire termination box for sanitary sewer lines, as shown on the plans, in accordance to the pertinent provisions of standard spec 607, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B (Vacant)**

**C (Vacant)**

**D Measurement**

The department will measure Tracer Wire Termination Box, by each individual unit, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.471	Tracer Wire Termination Box	Each

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for excavating, bedding materials, backfilling, fittings, and blocking.

**59. Removing Sanitary Manhole, Item SPV.0060.472.**

**A Description**

This special provision describes removing existing sanitary manhole, as shown on the plans, in accordance to the pertinent provisions of standard spec 204, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B (Vacant)**

**C Construction**

Salvage the existing manhole cover for the Village of West Baraboo. Dispose of the manhole off the project site.



**D Measurement**

The department will measure Removing Sanitary Manhole, by each individual unit, 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.0060.472	Removing Sanitary Manhole	Each

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for excavating, removing, salvaging, backfilling, compaction and transport to village storage area.

**60. Adjusting Sanitary Manhole Barrel Section, Item SPV.0060.473.****A Description**

This special provision describes adjusting the height of an existing sanitary manhole, as shown on the plans, in accordance to the pertinent provisions of standard spec 204, conforming to the requirements in the separate special provision entitled "General Requirements for Sanitary Sewer and Water", and as hereinafter provided.

**B Vacant**

Provide a 4-foot diameter precast concrete manhole section, of the height designated in the plans and conforming to the plan details for sanitary sewer manholes. Provide precast concrete adjustment rings conforming to the plan details for sanitary sewer manholes.

**C Construction**

Remove the existing manhole cover, chimney seal and adjustment rings. Do not reuse the existing manhole cover chimney seal and adjustment rings.

Remove and salvage the existing manhole upper cone section. Place the new manhole barrel section on the existing base section and replace the salvaged cone section, utilizing new joint sealant at each junction.

Install adjustment rings as required.

Salvage the existing manhole cover for the Village of West Baraboo.

**D Measurement**

The department will measure Adjusting Sanitary Manhole Barrel Section, by each individual unit, 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.0060.473	Adjusting Sanitary Manhole Barrel Section	Each

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for excavating, removing, salvaging manhole cover and manhole cone section, new manhole barrel section, joint sealer, adjustment rings, backfilling, compaction and transport to village storage area.

New sanitary sewer manhole cover, and new sanitary manhole external chimney seal will be paid for separately.

## **61. Connect to Existing Sanitary Sewer, Item SPV.0060.474.**

### **A Description**

This special provision describes connecting new sanitary sewer to existing sanitary sewer, as shown on the plans, conforming to the requirements in the separate special provision entitled "General Requirements for Sanitary Sewer and Water", and as hereinafter provided.

### **B Materials**

Provide fittings for the connection to the existing sanitary sewer.

### **C Construction**

Saw and remove existing sanitary sewer as necessary to install the new connection.

### **D Measurement**

The department will measure Connect to Existing Sanitary Sewer, by each individual unit, 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.0060.474	Connect to Existing Sanitary Sewer	Each

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for excavating, bedding materials, backfilling, granular backfill materials, compaction, and fittings.

## **62. Sanitary Manhole Cover, Item SPV.0060.475; Sanitary Manhole Chimney Seal, Item SPV.0060.476.**

### **A Description**

This special provision describes sanitary sewer manhole cover, and sanitary manhole external chimney seal, as shown on the plans, in accordance to the pertinent provisions of standard spec 611, conforming to the requirements in the separate special provision

entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B Materials**

Provide manhole covers for sanitary sewer manholes as required in “General Requirements for Sanitary Sewer and Water”.

Provide sanitary manhole external chimney seal for sanitary sewer manholes as required in “General Requirements for Sanitary Sewer and Water”.

**C (Vacant)**

**D Measurement**

The department will measure Sanitary Manhole Cover and Sanitary Manhole Chimney Seal, by each individual unit, 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.0060.475	Sanitary Manhole Cover	Each
SPV.0060.476	Sanitary Manhole Chimney Seal	Each

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

**63. Construction Staking Sanitary Sewer System, Item SPV.0060.477.**

**A Description**

This special provision describes construction staking for the sanitary sewer system, as shown on the plans, in accordance to the pertinent provisions of standard spec 650, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B (Vacant)**

**C Construction**

Perform the work in accordance to the requirements of standard spec 650.

**D Measurement**

The department will measure Construction Staking Sanitary Sewer System as each individual sanitary manhole staked and acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.477	Construction Staking Sanitary Sewer System	Each

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

#### **64. Construction Staking Casing Pipe, Item SPV.0060.478.**

##### **A Description**

This special provision describes construction staking for casing pipes for sanitary sewer and watermain, as shown on the plans, in accordance to the pertinent provisions of standard spec 650, conforming to the requirements in the separate special provision entitled "General Requirements for Sanitary Sewer and Water", and as hereinafter provided.

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

##### **C Construction**

Perform the work in accordance to the requirements of standard spec 650.

##### **D Measurement**

The department will measure Construction Staking Casing Pipe as each individual casing pipe staked and acceptably completed.

##### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.478	Construction Staking Casing Pipe	Each

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

#### **65. Covering Sign Type I, Item SPV.0060.500.**

##### **A Description**

This special provision describes providing and erecting sign covers that will remain in place at contract completion and become the department's property.

##### **B Materials**

Furnish sheet aluminum in accordance to standard spec 637.2.1.3, except furnish material with a minimum thickness of 0.040 inches. With the engineer's approval, the contractor may use systems specifically manufactured to cover highway signs or other weather resistant materials that will not damage the sign's reflective face. Do not use tape or other adhesives to fabricate or attach covers.

Ensure that covers are blank and opaque with color and retro reflective sheeting that matches the sign background.

Furnish spacers, 0.08-inch nylon washers, that will not damage the sign's reflective face.

### **C Construction**

Cover applicable parts of the sign face as detailed in the plans to ensure that the irrelevant messages are not visible. Use spacers between the sign and cover and attach at a minimum of four points per cover panel using 3/16 inch diameter aluminum rivets or aluminum self-tapping screws.

Repair or replace damaged signs as the engineer directs. Covers become the property of the department at contract completion.

### **D Measurement**

The department will measure Covering Sign Type I as each individual covering sign Type I, acceptably completed. Measurement includes all required sign covers per each individual Type I sign.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.500	Covering Sign Type I	Each

Payment is full compensation for providing sign covers and mounting hardware; repairing or replacing damaged signs; and disposal of surplus materials.

## **66. Seeding Mixture No. 75 Modified, Item SPV.0085.001.**

### **A Description**

This special provision describes furnishing and installing Seeding Mixture No. 75 Modified and associated Nurse Crop and Erosion Mat at the locations shown on the plans, in accordance to standard specs 628 and 630 and as hereinafter provided.

### **B Materials**

Provide Seeding Mixture No. 75 Modified of the following composition (listed as percent by proportion to the overall mix) with species composed of Pure Live Seed (PLS) with no named or improved varieties unless specifically listed below:

<b>COMMON NAME</b>	<b>LATIN NAME</b>	<b>% MIX</b>
New England Aster	<i>Aster novae-angliae</i>	3%
White False Indigo	<i>Baptisia leucantha (alba)</i>	1%
Ox Eye Sunflower	<i>Heliopsis helianthoides</i>	1%
Wild Bergamot	<i>Monarda fistulosa</i>	3%
Yellow Coneflower	<i>Ratibida pinnata</i>	2%
Black-eyed Susan	<i>Rudbeckia hirta</i>	3%
Ohio Goldenrod	<i>Solidago ohioensis</i>	1%
Blue Vervain	<i>Verbena hastata</i>	1%
Ironweed	<i>Veronica fasciculata</i>	1%
Culvers Root	<i>Veronicastrum virginicum</i>	2%
Big Bluestem	<i>Andropogon gerardii</i>	8%
Bristly Sedge	<i>Carex comosa</i>	5%
Porcupine Sedge	<i>Carex hystericina</i>	5%
Brown Fox Sedge	<i>Carex vulpinoidea</i>	8%
Canada Wild Rye	<i>Elymus canadensis</i>	15%
Virginia Wild Rye	<i>Elymus virginicus</i>	25%
Reed Manna Grass	<i>Glyceria grandis</i>	5%
Switchgrass	<i>Panicum virgatum</i>	8%
Little Bluestem	<i>Schizachyrum scoparium</i>	3%

Provide all PLS seed from Wisconsin nurseries specializing in growing native species from Wisconsin genotypes in Zone 5a of the Plant Hardiness Zone Map, Miscellaneous Publication 1475, revised 1990. Ensure all seed is cold, dry stratified. Possible sources of seed include, but are not limited to:

American Natives c/o Prairie Nursery P.O. Box 365 Westfield, WI (800) 476-9453	Agrecol 10101 North Casey Road Evansville, WI 53536 (608) 223-3571	Bluestem Farm S5920 Lehman Road Baraboo, WI 53913 (608) 356-0179
Taylor Creek Restoration Nursery 17921 Smith Road P.O. Box 256 Brodhead, WI 53520 (608) 897-8641	Wildlife Nurseries 904 Bauman Street Oshkosh, WI 54902 (920) 231-3780	Cardno J.F. New 6140 Cottonwood Drive, Ste A Fitchburg, WI 53719 (608) 661-2955

Provide annual rye (*Lolium multiflorum*) nurse crop in all areas seeded with Seeding Mixture No. 75 Modified.

Conform all seed to the requirements outlined in standard spec 630.

### **C Construction**

Conform all materials and methods to the requirements outlined in standard spec 630.

Employ Method A or Method C to sow Seeding Mixture No. 75 Modified in accordance to standard spec 630.

Seed Seeding Mixture No. 75 Modified at 0.8 pounds per 1000 square feet and make adjustments according to standard spec 630.3.3.5.1.

Seed Nurse Crop at 0.8 pounds per 1,000 square feet.

Install Erosion Mat Urban for Seeding Mixture No. 75 Modified in accordance with standard spec 628 and the Erosion Control Product Acceptability Lists for Multi-Modal Applications immediately after seeding.

Contractor will be responsible for the successful germination of nurse crop and Seeding Mixture No. 75 Modified and will be responsible for repairing or re-seeding any areas damaged or neglected during the period from seeding installation until final acceptance of the work.

#### **D Measurement**

The department will measure Seeding Mixture No. 75 Modified by the pound, 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.0085.001	Seeding Mixture No. 75 Modified	LB

Payment is full compensation for providing, handling, and storing all seed; for providing the required culture and inoculating seed as specified and as needed; and for preparing the seed bed, sowing, covering and firming the seed; for furnishing and installing all materials, including but not limited to seed and supplemental water.

Seeding, Nurse Crop will be paid for by the pound under pay item 630.0400.

Erosion Mat will be paid for by the square yard under the appropriate pay item in standard spec 628.

### **67. Bar Steel Reinforcement HS Stainless Bridges, Item SPV.0085.550.**

#### **A Description**

This work consists of furnishing and placing stainless steel reinforcing bars as shown in the plans and as hereinafter provided.

#### **B Materials**

##### **B.1 General**

Conform to standard spec 505.2 except as modified in this special provision.

## **B.2 Grade and Type**

The material shall conform to ASTM A 955 and to one of the following Unified Numbering System (UNS) designations: S31653, S31803, S32205, or S32304.

Supply Grade 60 bars, all of the same UNS designation.

## **B.3 Evaluation of Corrosion Resistance**

Prior to fabrication, supply test results from an independent testing agency certifying that stainless steel reinforcement from the selected UNS designation meets the requirements of Annex A1 of ASTM A955. Corrosion performance for the selected UNS designation shall be redemonstrated if the processing method is significantly altered. Removal of mill scale or pickling processes used for stainless steel reinforcement supplied under this contract shall be the same as those used to prepare the samples tested per Annex A1 of ASTM A955.

## **B.4 Chemical Composition**

Material shall conform to that specified in ASTM A276, Table 1, Chemical Requirements, for the given UNS designation.

## **B.5 Heat Treatment**

Bars may be furnished in one of the heat treatment conditions listed in ASTM A955, and as needed to meet the requirements of this specification.

## **B.6 Finish**

Supply bars that are free of dirt, mill scale, oil and debris by pickling to a bright or uniform light finish. Bars supplied with a tarnished or mottled finish are sufficient cause for rejection. Fabricate and bend bars using equipment that has been thoroughly cleaned or otherwise modified to prohibit contamination of the stainless steel from fragments of carbon steel or other contaminants.

Bars displaying rust/oxidation, questionable blemishes, or lack of a bright or uniform pickled surface are subject to rejection.

## **B.7 Bending and Cutting**

Bend bars in accordance to standard spec 505.3.2 and ASTM A955. Use fabrication equipment and tools that will not contaminate the stainless steel with black iron particles. To prevent such contamination, equipment and tools used for fabrication, including bending and cutting, shall be solely used for working with stainless steel. Do not use carbon steel tools, chains, slings, etc. when fabricating or handling stainless steel reinforcing bars.

## **B.8 Control of Material**

All reinforcement bars or bar bundles delivered to the project site shall be clearly identified with tags bearing the identification symbols used in the Plans. The tags shall also include the UNS designation, heat treat condition, heat number, grade (corresponding



to minimum yield strength level), and sufficient identification to track each bar bundle to the appropriate Mill Test Report.

Provide samples for department testing and acceptance in accordance to the CMM requirements for Concrete Masonry Reinforcement – Bar Steel (Uncoated).

Provide Mill Test Reports (MTR) for the project that:

- Are from the supplying mill verifying that the stainless reinforcement provided has been sampled and tested and the test results meet ASTM A 955, ASTM A 276, Table 1 and the Contract requirements;
- Include a copy of the chemical analysis of the steel provided, with the UNS designation, the heat lot identification, and the source of the metal if obtained as ingots from another mill;
- 
- Include a copy of tensile strength, yield strength and elongation tests per ASTM A955 on each of the sizes of stainless steel reinforcement provided;
- 
- Permit positive determination that the reinforcement provided is that which the test results cover;
- 
- Include a statement certifying that the materials meet standard spec 106 regarding material being melted and manufactured in the United States; and
- 
- Certify that the bars have been pickled to a bright or uniform light finish.

## **C Construction**

### **C.1 General**

Conform to the construction methods in standard spec 505.3 except as modified in this special provision:

Ship, handle, store, and place the stainless steel reinforcing bars according to the applicable provisions with the following additions and exceptions:

- Prior to shipping, ensure that all chains and steel bands will not come into direct contact with the stainless steel reinforcing bars. Place wood or other soft materials (i.e., thick cardboard) under the tie-downs. Alternatively, use nylon or polypropylene straps to secure the stainless steel reinforcing bars.
- When bundles of reinforcing steel and stainless steel reinforcing bars must be shipped one on top of the other, load the stainless steel reinforcing bars on top. Use wooden spacers to separate the two materials. Space supports sufficiently close to prevent sags in the bundles.

- Outside storage of stainless steel reinforcing bars is acceptable. Cover the stainless steel reinforcing bars with tarpaulins.
- Store stainless steel reinforcing bars off the ground or shop floor on wooden supports and separately from carbon steel reinforcement. Space supports sufficiently close to prevent sags in the bundles.
- Do not use carbon steel tools, chains, slings, etc. when fabricating or handling stainless steel reinforcing bars. Only use nylon or polypropylene slings. Protect from contamination during construction operations including any cutting, grinding, or welding above or in the vicinity of the stainless steel bars. Flame cutting or welding of stainless steel reinforcing bars is prohibited.
- Place all stainless steel reinforcing bars on bar chairs that are solid plastic or stainless steel. Fabricate stainless steel metal chairs and continuous metal stainless steel supports from stainless steel conforming to the same requirements and UNS designations as stainless steel reinforcing bar as listed in Section B, “Materials”. Use stainless steel chairs with plastic-coated feet above steel beams.
- 
- Use stainless steel tie wires to tie stainless steel reinforcing bars. Tie wires shall conform to the same requirements and UNS designations as stainless steel reinforcing bars as listed in Section B, “Materials”, dead soft annealed, annealed at size. The tie wire does not need to be of the same UNS designation as the bar reinforcement.

Do not tie stainless steel reinforcing bars to, or allow contact with uncoated reinforcing bars, galvanized forming hardware or attachments, or galvanized conduits. Direct contact with these materials is not acceptable. When stainless steel reinforcing bars or dowels must be near uncoated steel reinforcing bars, galvanized forming hardware, or other galvanized metals, maintain a minimum 1-inch clearance between the two metals. Where insufficient space exists to maintain this minimum, sleeve the bars with a continuous 1/8-inch minimum thickness polyethylene or nylon tube extending at least 1 inch in each direction past the point of closest contact between the two dissimilar bars and bind them with nylon or polypropylene cable ties. Sleeves are not required between stainless steel reinforcing bars and welded girder shear studs. Stainless steel reinforcing bars are allowed to be in direct contact with undamaged epoxy-coated reinforcing bars.

Uncoated fasteners (such as used for static safety lines on beams), anchors, lifting loops, etc., that extend from the top flange of prestressed concrete beams into the bridge deck shall be completely removed or cut off flush with the top flange of the beam prior to casting the deck.

## **C.2 Splices**

Splices shall be as shown in the plans. Substitution of stainless steel mechanical splices in lieu of lap slices shown on the plans may be permitted in certain situations subject to written approval by the engineer. Provide mechanical splices for stainless steel reinforcing

bars made of stainless steel conforming to one of the UNS designations listed in section B, “Materials” and meeting the minimum capacity, certification, proof testing and written approval requirements of standard spec 550.3.3.4.

If it is necessary or the contractor elects to increase or alter the number or type of bar splices from those indicated in the plans, provide copies of plan sheets to the engineer showing the revised reinforcement layout, type, length and location of revised bar splices and revised bar lengths. The engineer must approve the location of new lap splices or substitution of mechanical bar couplers in lieu of bar lap splices prior to fabrication. New lap splices must be at least as long as those shown in the plans.

#### **D Measurement**

The department will measure Bar Steel Reinforcement HS Stainless Bridges by the pound acceptably completed. The department will compute the stainless steel bar weight using the standard weight per foot of equivalent size carbon steel reinforcing bars (ASTM A615) regardless of which stainless steel alloy is provided.

If the contractor is permitted to alter the reinforcement layout per C.2, no adjustment to the reinforcement bar quantity will be made for such alterations. Mechanical bar couplers that are provided but not shown in the plans are included in the item Bar Steel Reinforcement HS Stainless Bridges and will not be measured separately.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0085.550	Bar Steel Reinforcement HS Stainless Bridges	LB

Payment is full compensation for providing, transporting and placing the stainless steel reinforcing bars with all component materials as described above.

If the contractor is permitted to alter the reinforcement layout per C.2, no additional compensation will be made for such alterations. Mechanical bar couplers that are provided, but not shown in the plans are included in the item Bar Steel Reinforcement HS Stainless Bridges and will not be paid for separately.

### **68. Coconut Fiber Roll, Delivered, Item SPV.0090.004; Coconut Fiber Roll, Installed, Item SPV.0090.005.**

#### **A Description**

This special provision describes furnishing and placing Coconut Fiber Roll(s) at the locations shown on the plans, as directed by the engineer, and as hereinafter provided.

**B Materials**

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

**C Construction**

Coconut Fiber Rolls shall be delivered and installed using the specifications in the plan and Special Provisions. Securely anchor Coconut Fiber Rolls by burying the bottom one-third of the log and fastening them to stakes.

**D Measurement**

The department will measure Coconut Fiber Roll, Delivered and Coconut Fiber Roll, Installed in length by the linear foot, in place for each roll, complete and accepted in accordance to the terms of the contract.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.004	Coconut Fiber Roll, Delivered	LF
SPV.0090.005	Coconut Fiber Roll, Installed	LF

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

**69. Pavement Marking Grooved Contrast Preformed Thermoplastic 4-Inch, Item SPV.0090.300; 8-Inch, Item SPV.0090.301.**

**A Description**

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

**B Materials**

Furnish 125 mils contrast preformed thermoplastic pavement marking from the department's approved products list. If required, furnish sealant material recommended by the manufacturer.

**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 preformed thermoplastic pavement marking.

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

### **C.2 Groove Depth**

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

### **C.3 Groove Width – Linear Markings**

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

### **C.4 Groove Position**

Position the groove edge in accordance to the plan details.

#### **C.4.1 Linear Marking**

Groove at a minimum of 4-inches, but not greater than, 12-inches from both ends of the line segment. Achieve straight alignment with the grooving equipment.

## **C 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 ft<sup>3</sup>/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**

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

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

### **C.5.3 Existing Asphalt**

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

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

## **C.6 Preformed Thermoplastic Application**

Preheat the surface if necessary based on manufacturer's recommendation.

Apply contrast preformed thermoplastic in the groove as per manufacturer's recommendations. If manufacturer's recommendations require a sealant, apply a sealant 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 sealant in the remainder counties and for the remainder of the year. The sealant must be wet.

## **D Measurement**

The department will measure Pavement Marking Grooved Contrast Preformed Thermoplastic (width) in length by the linear foot, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.300	Pavement Marking Grooved Contrast Preformed Thermoplastic 4-Inch	LF
SPV.0090.301	Pavement Marking Grooved Contrast Preformed Thermoplastic 8-Inch	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.

**70. Pavement Marking Grooved Contrast Preformed Thermoplastic Crosswalk 6-Inch, Item SPV.0090.302; 18-Inch, Item SPV.0090.303.**

**A Description**

This special provision describes grooving the pavement surface, and furnishing and installing contrast preformed thermoplastic pavement marking as shown on the plans, in accordance to standard spec 647, and as hereinafter provided.

**B Materials**

Furnish 125 mils preformed thermoplastic pavement marking from the department's approved products list. If required, furnish sealant material recommended by the manufacturer.

**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 preformed thermoplastic pavement marking.

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

**C.2 Groove Depth**

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

**C.3 Groove Width – Linear Markings**

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

## **C.4 Groove Position**

Position the groove edge in accordance to the plan details.

### **C.4.1 Linear Marking**

Groove at a minimum of 4-inches, but not greater than, 12-inches from both ends of the line segment. Achieve straight alignment with the grooving equipment.

### **C.4.2 Special Marking**

Groove at a minimum of 4-inches from the perimeter of the special marking. Groove separate areas for Word Items.

## **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 sealant, and placement of the pavement marking. Use a high-pressure air blower with at least 185 ft<sup>3</sup>/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 Asphalt**

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

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

## **C.6 Preformed Thermoplastic Application**

Preheat the surface if necessary based on manufacturer's recommendation.

Apply preformed thermoplastic in the groove as per manufacturer's recommendations. If manufacturer's recommendations require a sealant, apply a sealant 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 sealant in the remainder counties and for the remainder of the year. The sealant must be wet.



**D Measurement**

The department will measure Pavement Marking Grooved Preformed Thermoplastic Crosswalk 6-Inch and Pavement Marking Grooved Preformed Thermoplastic 18-Inch in length by the linear foot, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.302	Pavement Marking Contrast Grooved Preformed Thermoplastic Crosswalk 6-Inch	LF
SPV.0090.303	Pavement Marking Contrast Grooved Preformed Thermoplastic 18-Inch	LF

Payment is full compensation for cleaning and preparing the pavement surface, furnishing and installing the material.

**71. Water Main Ductile Iron 12-Inch, Item SPV.0090.450; Water Main Ductile Iron 8-Inch, Item SPV.0090.451; Water Main Ductile Iron 6-Inch, Item SPV.0090.452.**

**A Description**

This special provision describes water main 12 inch, water main 8 inch, water main 6 inch, as shown on the plans, in accordance to the pertinent provisions of standard spec 607, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B (Vacant)****C (Vacant)****D Measurement**

The department will measure Water Main Ductile Iron 12-Inch, Water Main Ductile Iron 8-Inch, and Water Main Ductile Iron 6-Inch, in length by the linear foot in place, measured along the watermain centerline, completed and accepted.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.450	Water Main Ductile Iron 12-Inch	LF
SPV.0090.451	Water Main Ductile Iron 8-Inch	LF
SPV.0090.452	Water Main Ductile Iron 6-Inch	LF

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for furnishing all watermain fittings and embedment material as required.

**72. Water Main Copper Service 1-Inch, Item SPV.0090.453.**

**A Description**

This special provision describes water main copper service 1 inch, as shown on the plans, in accordance to the pertinent provisions of standard spec 607, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B (Vacant)**

**C (Vacant)**

**D Measurement**

The department will measure Water Main Copper Service 1-Inch, in length by the linear foot in place, measured along the watermain centerline, completed and accepted.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.453	Water Main Copper Service 1-Inch	LF

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for furnishing all watermain service fittings and embedment material as required.

**73. Removing Existing Water Main, Item SPV.0090.454.; Removing Existing Copper Water Service, Item SPV.0090.455.**

**A Description**

This special provision describes removing existing water main, as shown on the plans, in accordance to the pertinent provisions of standard spec 607, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B Materials**

Provide Type II backfill for all excavations.

**C Construction**

Place backfill material in uniform layers and mechanically compact, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”.

**D Measurement**

The department will measure Removing Existing Water Main and Removing Existing Copper Service, in length by the linear foot in place, measured along the watermain centerline, completed and accepted.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.454	Removing Existing Water Main	LF
SPV.0090.455	Removing Existing Copper Water Service	LF

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for furnishing all removals, disposal of pipe, and backfill material, as required.

**74. Removing Existing Asbestos Cement Water Main, Item SPV.0090.456.****A Description**

This special provision describes removing existing asbestos cement water main, as shown on the plans, in accordance to the pertinent provisions of standard spec 607, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B Materials**

Provide Type II backfill for all excavations.

**C Construction**

Asbestos cement pipe removal shall be performed by qualified abatement contractor. Obtain required permits and provide copies to the engineer.

Place backfill material in uniform layers and mechanically compact, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”.

**D Measurement**

The department will measure Removing Existing Asbestos Cement Water Main, in length by the linear foot in place, measured along the watermain centerline, completed and accepted.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.456	Removing Existing Asbestos Cement Water Main	LF

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for furnishing all removals, disposal of pipe, permits and backfill material, as required.

**75. Sanitary Sewer Main SDR 35, 8-Inch, Item SPV.0090.457; Sanitary Sewer Main C900, 8-Inch, Item SPV.0090.458; Tracer Wire, Item SPV.0090.459.**

**A Description**

This special provision describes sanitary sewer main, SDR 35, 8 inch; sanitary sewer main, C900, 8 inch; and tracer wire as shown on the plans, in accordance to the pertinent provisions of standard spec 607, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B Materials**

Pipe Embedment Materials - On site sand or gravel materials may be used for embedment and initial backfill. Embedment material shall be free of clay fines and stones larger than 1-1/2 inches in diameter. Pipe embedment shall be compacted with a vibratory compactor to 90% of standard proctor density. At the contractor’s option, clean gravel may be used for embedment material.

**C (Vacant)**

**D Measurement**

The department will measure Sanitary Sewer Main SDR 35 8-Inch, Sanitary Sewer Main C900 8-Inch, and Tracer Wire, in length by the linear foot in place from center of manhole to center of manhole, completed and accepted.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.457	Sanitary Sewer Main SDR 35 8-Inch	LF
SPV.0090.458	Sanitary Sewer Main C900 8-Inch	LF
SPV.0090.459	Tracer Wire	LF

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for bypass pumping, and embedment material.

**76. Sanitary Sewer Lateral, 6-Inch, Item SPV.0090.460.**

**A Description**

This special provision describes sanitary sewer lateral, 6 inch, as shown on the plans, in accordance to the pertinent provisions of standard spec 607, conforming to the

requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B Materials**

Pipe Embedment Materials - On site sand or gravel materials may be used for embedment and initial backfill. Embedment material shall be free of clay fines and stones larger than 1-1/2 inches in diameter. Pipe embedment shall be compacted with a vibratory compactor to 90% of standard proctor density. At the contractor’s option, clean gravel may be used for embedment material.

Provide a 6” PVC plug at the end of the lateral where no existing connection is required.

**C (Vacant)**

**D Measurement**

The department will measure Sanitary Sewer Lateral 6-Inch, in length by the linear foot in place from center of wye to the end of the installed pipe, completed and accepted, measured along the centerline of the pipe.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.460	Sanitary Sewer Lateral 6-Inch	LF

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for embedment material and PVC plug, if required.

**77. Removing Sanitary Sewer, Item SPV.0090.461.**

**A Description**

This special provision describes removing sanitary sewer main, as shown on the plans, in accordance to the pertinent provisions of standard spec 607, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B (Vacant)**

**C Construction**

Remove the sanitary sewer main in conjunction with the installation of the new sanitary sewer main. Dispose of all removed materials off the project site.

**D Measurement**

The department will measure Removing Sanitary Sewer Main, in length by the linear foot, acceptably completed, measured along the centerline of the pipe.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.461	Removing Sanitary Sewer	LF

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for bypass pumping, excavating, removing, backfilling, compaction and disposal.

**78. Casing Pipe Reinforced Concrete Class V 30-Inch, Item SPV.0090.462.****A Description**

This special provision describes the installation of casing pipe reinforced concrete class V 30 inch, as shown on the plans, in accordance to the pertinent provisions of standard spec 608, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B Materials**

Provide reinforced concrete storm sewer pipe Class V in accordance to the pertinent provisions of standard spec 608.

Provide temporary bulkheads consisting of concrete brick and mortar in accordance to standard spec 519.

Provide 2-inch diameter round steel pipe to mark each end of the casing, conforming to standard spec 616.2.3.3.

**C Construction**

Install casing pipe in accordance to the pertinent provisions of standard spec 608 and “General Requirements for Sanitary Sewer and Water”

Install the concrete brick and mortar bulkhead in accordance to standard spec 519.

Install 1 steel pipe at each end of the casing. The pipe length shall extend from the invert of the casing to within 1 foot of the finished ground line.

**D Measurement**

The department will measure Casing Pipe Reinforced Concrete Class V 30-Inch by the linear foot, acceptably completed, determined by multiplying the number of units in the casing pipe by their commercial laying length.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.462	Casing Pipe Reinforced Concrete Class V 30-Inch	LF

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the contract work, and for casing bulkhead and steel marker pipes.

**79. Construction Staking Water Main, Item SPV.0090.463.**

**A Description**

This special provision describes construction staking for watermain, as shown on the plans, in accordance to the pertinent provisions of standard spec 650, conforming to the requirements in the separate special provision entitled “General Requirements for Sanitary Sewer and Water”, and as hereinafter provided.

**B (Vacant)**

**C Construction**

Perform the work in accordance to the requirements of standard spec 650.

**D Measurement**

The department will measure Construction Staking Water Main by the linear foot, acceptably completed, measured along the water main centerline.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.463	Construction Staking Water Main	LF

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

**80. Fence Chain Link Polymer-Coated 8-Ft., Item SPV.0090.551; 4-Ft., Item SPV.0090.650.**

**A Description**

This special provision describes furnishing and installing a new polymer-coated fence system on structures in accordance to the pertinent plan details, as directed by the engineer and as hereinafter provided. The color of all components in this fence system shall be the same and shall be as specified on the plans.

**B Materials**

All materials for this fence system shall be new stock, free from defects impairing strength, durability, and appearance. Fabric shall be produced by methods recognized as good commercial practice. Wire used in the manufacture of the fabric shall be capable of being woven into fabric without the polymer-coating cracking or peeling. Pipes used in framework shall be straight, true to section and free of defects. All burrs at the ends of

pipes shall be removed before galvanizing. The polymer-coating shall be a dense impervious covering, applied without voids, tears or cuts that reveal the substrate. Excessive roughness, bubbles, blisters and flaking in the polymer-coating will be a basis for rejection.

### **B1 Fabric**

Provide steel chain link fence fabric that conforms to the requirements of ASTM F668, Class 2b, a polymer-coating fused and adhered to wire that is zinc-coated. Provide fabric woven from 9-gage wire using plan specified mesh size, diamond pattern, with both the top and bottom selvages knuckled. The minimum breaking strength of the wire shall be 1290 lbs. The color of polymer-coating shall conform to the requirements of ASTM F934.

### **B2 Framework**

Provide steel rails, posts and post sleeves conforming to the requirements of ASTM F1083, Standard Weight Pipe (Schedule 40) of the size (O.D.) and weight as shown on the plans. The minimum yield strength shall be 30,000 psi and the minimum tensile strength shall be 48,000 psi. These components shall be zinc-coated inside and outside by the hot-dip process as stated in ASTM F1083. Provide polymer-coating over zinc-coating that conforms to ASTM F1043. The color of polymer-coating shall conform to the requirements of ASTM F934, and match the color of the other fence components. Weld base plate to posts or post sleeves and complete any additional welding of components before galvanizing.

### **B3 Fittings**

Provide end post caps, line post caps, top rail sleeves, rail ends, line rail clamps, brace bands, tension bands, tension bars, and tie wires that are steel and conform to the requirements of ASTM F626. Tie wires shall be round and 9-gage wire. These components (excluding tie wires) shall be zinc-coated by the hot-dip process as stated in ASTM F626. Provide polymer-coating over zinc-coating on components (excluding tie wires) that conforms to the requirements of ASTM F626. For tie wires, provide polymer-coating on wire that is zinc-coated using the same procedure as used for the wires in the fence fabric. End post caps and line post caps shall fit tightly over posts to prevent moisture intrusion. Supply dome style caps for end posts and loop type caps for line posts. The color of polymer-coating shall conform to the requirements of ASTM F934, and match the color of the other fence components.

### **B4 Bolts**

All bolts are to be supplied with lock washers and nuts. Use galvanized steel bolts, nuts and washers per plan details.

### **B5 Tests**

#### **B5.1 Fabric and Tie Wire**

Breaking Strength: ASTM A370

#### Zinc-Coating Requirements

Weight of Zinc-Coating: ASTM A90



#### Polymer-Coating Requirements

Thickness of Polymer-Coating: ASTM F668  
Adhesion: ASTM F668  
Accelerated Aging Test: ASTM F668, D1499  
Mandrel Bend Test: ASTM F668

#### **B5.2 Framework**

Tensile and Yield Strength: ASTM E8

#### Zinc-Coating Requirements

Weight of Zinc-Coating: ASTM A90

#### Polymer-Coating Requirements

Thickness of Polymer-Coating: ASTM E376  
Adhesion: ASTM F1043  
Accelerated Aging Test: ASTM F1043, D1499

#### **B5.3 Fittings**

#### Zinc-Coating Requirements

Weight of Zinc-Coating: ASTM A90

#### Polymer-Coating Requirements

Thickness of Polymer-Coating: ASTM F626  
Adhesion: ASTM F1043 (same test as for framework)  
Accelerated Aging Test: ASTM F1043, D1499 (same test as for framework)

#### **B6 Submittals**

In addition to the engineer, send submittals listed in this section to the name below for informational purposes:

David Nelson  
WisDOT (Bureau of Structures)  
4802 Sheboygan Ave. (Room 601)  
PO Box 7916  
Madison, WI 53707

#### **B6.1 Shop Drawings**

Submit shop drawings showing the details of fence construction. Show the fence height, post spacing, rail location, and all dimensions necessary for the construction of the chain link fence. Label the end posts, line posts, rails, post sleeves, top rail sleeves, bolts and fittings. State the polymer-coating type used on the fabric, framework and fittings and the Class of coating used on the fabric. State the color of polymer-coating to be used on the fence components. For the fabric, state the wire gage, mesh size, and type of selvages used. For the framework, state the size (O.D.) and unit weight for the posts and rails. For the fittings, state the size for top rail sleeves, brace bands, tension bands, tension bars, line rail clamps, size and type of bolts, and the tie wire gage. State the material type used for fabric, framework, and fittings. Also give the breaking strength for the fabric wire and the tensile and yield strength properties for the framework.

## **B6.2 Specification Compliance**

Submit certification of compliance with material specifications. Provide material certification and test documentation for fabric, framework, fittings and hardware that shows that all materials meet or exceed the specifications of this contract and the tests in B5. This document shall provide the name, address and phone number of the manufacturer, and the name of a contact person.

## **C Construction**

### **C1 Delivery, Storage and Handling**

Deliver material to the site in an undamaged condition. Upon receipt at the job site, all materials shall be thoroughly inspected to ensure that no damage occurred during shipping or handling and condition of materials is in conformance with these specifications. If polymer-coating is damaged, contractor shall repair or replace components as necessary to the approval of the engineer at no additional cost to the Owner. Carefully store material off the ground to ensure proper ventilation and drainage and to provide protection against damage caused by ground moisture. Handle all polymer-coated material with care.

### **C2 Touch-up and Repair**

For minor damage caused by shipping, handling or installation to polymer-coated surfaces, touch-up the finish in conformance with the manufacturer's recommendations. Provide touch-up coating such that repairs are not visible from a distance of 6-feet. If damage is beyond repair, the fencing component shall be replaced at no additional cost to the Owner. The contractor shall provide the engineer with a copy of the manufacturer's recommended repair procedure and materials before repairing damaged coatings.

### **C3 General**

Install the chain link fence in accordance to ASTM F567 and the manufacturer's instructions. The contractor shall provide staff that is thoroughly familiar with the type of construction involved and materials and techniques specified. Chain link fabric shall be installed on the side of the posts indicated on the plans. Fabric shall be attached to the end posts with tension bars and tension bands. It shall be attached to rails, and posts without tension bands, with tie wires. The fabric shall be installed and pulled taut to provide a smooth and uniform appearance free from sag, without permanently distorting the fabric diamond or reducing the fabric height. Install top rail to pass through line post caps and form a continuous brace between end posts. Minimum length of top rail between splices shall be 20-feet. Splice top rail at joints with sleeves for a rigid connection. Locate splices near 1/4 point of post spacing. Heads of bolts shall be on the side of the fence adjacent to pedestrian traffic.

### **D Measurement**

The department will measure Fence Chain Link Polymer-Coated (Height) 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.0090.551	Fence Chain Link Polymer-Coated 8-Ft.	LF
SPV.0090.650	Fence Chain Link Polymer-Coated 4-Ft.	LF

Payment is full compensation for fabricating, galvanizing and polymer-coating all fence components, and transporting to jobsite; and for erecting components to create a polymer-coated fence system, including any touch-up and repairs.

## **81. Geotechnical Instrumentation, Item SPV.0105.001.**

### **A Description**

#### **A.1 General**

This special provision describes installing geotechnical instrumentation and collecting data for the project for the purpose of monitoring ground movement in the vicinity of structures and nearby adjacent property and movement during construction of the embankments. The instrumentation program specified herein and shown on the plans is not intended to be used to ensure the safety of the work.

Install the required instrumentation and collecting the required ground monitoring data as specified herein. The instrumentation program required by this article does not relieve the contractor of responsibility for providing additional instrumentation and monitoring if, in the contractor's opinion, such additional instrumentation and monitoring are necessary to accomplish the work.

This article covers the work necessary to furnish and install geotechnical instrumentation, maintaining installed instruments, taking initial and subsequent instrument readings, and removal and abandonment, if necessary, of the instruments after construction.

#### **A.2 Submittals**

Submit the following specific information for information only, at least 30 days prior to the start of instrument installation, except submit copies of DNR forms as soon as possible after instruments are installed or abandoned:

1. Submit qualifications and experience of instrumentation specialists and personnel.
2. Instrumentation shop drawings detailing locations, depths based on general information shown on the plans, type, details, and other pertinent information showing the installation details for each type of instrumentation required.
3. Drawing that indicates the locations of control points and benchmarks associated with surveys for monitoring geotechnical instrumentation.
4. Description of methods for installing and protecting all instruments.
5. Schedule of instrument installation related to significant activities or milestones in the overall project.

6. Following installation of the instruments and prior to the start of construction, submit as-built shop drawings showing the exact installed location, the instrument identification number, the instrument type, the installation date and time, the heading station or portal on the installation date, when applicable, and the anchor or tip elevation and instrument length, when applicable, and installed locations of control points and benchmarks associated with surveys for monitoring geotechnical instrumentation. Include details of installed instruments, accessories, and protective measures including all dimensions and materials used.
7. Manufacturer's literature describing installation, operation, and maintenance procedures for all instruments, materials, readout units, and accessories.
8. Drilling and installation logs for instrumentation installations prepared by the instrumentation specialist.
9. Submit for each instrument to be installed, as applicable, a certificate issued by the instrument's manufacturer stating that the manufacturer has inspected and tested each instrument before it leaves the factory to see that the instrument is working correctly and has no defects or missing parts.
10. Submit permits and consents for drilling holes from ground surface and conducting monitoring activities.
11. Plans for geotechnical instrumentation to be installed at contractor's option.
12. Copies of completed DNR abandonment forms for subsurface settlement markers, settlement system and vibrating wire piezometers.

## **A.2 Definitions and Locations**

**Open Ground:** Ground without any above- or below-grade facilities, paved or unpaved roads, and utilities within a 25-foot horizontal radius.

**Piezometer (PZ):** A vibrating wire piezometer constructed in a borehole.

<b>Point No.</b>	<b>Feature</b>	<b>Station</b>	<b>Off set</b>	<b>Estimated Tip Elev.</b>
EB1	Embankment	514+95.15 EB	70' LT	972 feet
EB2	Embankment	514+95.15 EB	115' LT	960 feet
EB3	Embankment	518+95.15 EB	40' RT	970 feet
EB4	Embankment	519+95.15 EB	40' RT	992 feet
EB5	Embankment	519+95.15 EB	105' RT	965 feet
EB6	Embankment	522+95.15 EB	45' RT	992 feet
EB7	Embankment	522+95.15 EB	125' RT	975 feet
EB8	Embankment	524+95.15 EB	135' RT	980 feet

**Readout Post (ROP):** Posts with the readout box, positioned with agreement between the contractor and engineer.

**Slope Inclinometers (SI):** The department will install slope inclinometers at the following locations. Do not damage slope inclinometers. Contractor at his own expense will replace any damaged slope inclinometers.

Point No.	Feature	Station	Off set	Estimated Tip Elev.
EB2	Embankment	514+95.15 EB	115' LT	940 feet
EB11	Embankment	518+95.15 EB	105' RT	940 feet

**Settlement GuageSG:** A plate and riser system.

Point No.	Feature	Station	Off set
EB1	Embankment	514+95.15 EB	70' LT
EB3	Embankment	518+95.15 EB	40' RT
EB4	Embankment	519+95.15 EB	40' RT
EB6	Embankment	522+95.15 EB	45' RT
EB9	Embankment	503+88.22 EB	40' RT
EB10	Embankment	507+91.08 EB	70' LT

#### **A.4 Quality Assurance**

##### **A.4.1 General**

Notify the engineer at least 24 hours prior to all instrumentation installation operations so that the engineer may monitor the installation work.

Each instrument specified herein shall be the product of an acceptable manufacturer currently engaged in manufacturing geotechnical instrumentation hardware of the specified types.

##### **A.4.2 Personnel Qualifications**

Qualified technicians with a minimum of 2 years experience in the installation of geotechnical instrumentation similar to those specified herein.

Instrumentation Specialist: A professional civil or geotechnical engineer or engineering geologist, with a minimum of 5 years experience in the installation of instrumentation specified herein, shall prepare instrumentation shop drawings and supervise and direct technicians and be responsible for instrument installation required. The instrumentation specialist shall be physically present at the installation sites to supervise the installations.

##### **A.4.3 Control Points**

Surveys for monitoring geotechnical instrumentation shall be referenced to the same control points and benchmarks established for setting out the work. Control points shall be tied to benchmarks and other monuments outside of the zone of ground movements that might result from underground excavations.

#### **A.4.4 Tolerances**

SGs and PZs shall be installed within 12 inches of the horizontal locations indicated in this special provision or approved shop drawings.

Should actual field conditions prohibit installation at the locations and elevations indicated on the plans, prior acceptance shall be obtained from the engineer for new instrument locations and elevations.

#### **A.4.5 Project Conditions**

Obtain necessary permits for the installation of monitoring systems.

Provide the engineer and the department access to the instruments at all times.

All PZs shall be protected from vandalism or other accidental damage.

### **B Materials**

#### **B.1 Protection**

Provide a protection cover for readout post.

#### **B.2 Filter Pack**

Filter pack shall be clean natural silica sand; graded such that all of the material passes the No. 4 sieve and is retained on the No. 30 sieve.

#### **B.3 Filter Pack Seal**

Filter pack seal shall be clean natural silica sand; graded such that all of the material passes the No. 10 sieve and is retained on the No. 40 sieve.

#### **B.4 Bentonite Seal**

Bentonite pellets used to form bentonite seals shall be 3/8-inch diameter compressed pellets made from high swelling montmorillonite.

#### **B.5 Grout**

Grout mixes for each instrument type are specified herein.

#### **B.6 Piezometers (PZ)**

The vibrating wire piezometer cable will run to the cable box in a trench backfilled with granular backfill.

#### **B.7 Settlement Gauge (SG)**

Settlement gauges placed on granular material.

### **C Construction**

#### **C.1 General**

Instrumentation shall be installed at the locations indicated on this special provision or approved shop drawings, and as approved by the engineer. The piezometer shall be installed as described in Embankment Construction.

Locate conduits and underground utilities in all areas where borings are to be drilled and instruments installed. Instrument locations shall be modified, as approved by the engineer, to avoid interference with the existing conduits and utilities. Repair damage to existing utilities resulting from instrument installations at no additional cost to the department.

Geotechnical instrumentation shall be installed and baseline surveys or initial readings completed as described in Embankment Construction.

An as-installed position survey shall be conducted to determine the horizontal and vertical positions of all instruments in accordance to the requirements herein. Furnish the engineer with a copy of the results within 3-days of field survey data acquisition.

### **C.2 Review of Instrumentation Plan**

The instrumentation plan specified herein and shown on the plans may be modified by the engineer prior to installation, to suit the contractor's means and methods of construction. Prior to ordering materials or installation of instruments, confer with the engineer as to the suitability of the planned instruments and locations, regarding proximity to excavations and compatibility with the means and methods of excavation, ground support and groundwater control.

Replace, at no cost to the department, instrumentation in place that becomes inaccessible or unreadable as a result of the contractor's means and methods of construction or changes in the contractor's means and methods of construction that could have been anticipated by the contractor prior to installation. The locations of replacement instruments shall be jointly determined by the engineer and contractor.

### **C.3 Installation**

Complete installation and testing of each instrument a minimum of one week prior to as described in Embankment Construction.

The anticipated general locations of instrumentation are shown in this special provision. Check instruments to be installed in borings for interference with utilities and subsurface facilities. Mark locations of all instruments in the field prior to installation acceptance of the location obtained from the engineer. Confer with the engineer in the event that conflicts with utilities occur, and changes to the planned locations become necessary.

All instruments shall be clearly marked, permanently labeled, and protected to avoid being obstructed or otherwise damaged by construction operations or the general public. Protective housing and box or vault covers shall be marked.

After installation of each instrument, survey the as-built location to define the vertical and lateral positions of the exposed parts.

#### **C.4 Protection and Maintenance**

Flag and protect all locations. Exercise care during construction so as to avoid damage to instrumentation. Repair or replace instrumentation that is damaged as a result of the contractor's operation at his expense. The engineer will determine whether repair or replacement is required. Complete the repair or replacement as soon as practical after notification by the engineer as to whether a repair or replacement is required.

Maintain exposed parts of installed instruments as necessary to ensure their availability for use for the duration of the work. The engineer will perform maintenance and calibration of readout devices.

#### **C.5 Soil Drilling and Sampling**

Hollow stem auger methods may be used to provide a casing for temporary soil support. Boreholes shall be oversized at the ground surface as necessary to accommodate installation of protective covers.

Arrange ports in the drilling bit so that there is no jetting action of the drilling fluid ahead of the bit. Use the minimum amount of fluid necessary to carry away the cuttings.

Complete soil sampling at intervals of 5.0 feet or less using standard penetration tests that are conducted in accordance to ASTM D 1586.

Store representative sample portions not retained for analytical laboratory testing in glass jars approximately 5 inches high and 1-3/4 inches in inside diameter at the mouth. Provide jars with metal screw caps containing a rubber or waxed paper gasket that forms an airtight seal when closed. Provide jars with labels large enough to identify the jar with the project number and name, boring number, sample number, depths at top and bottom of sample, blow count and recovery. Perform the laboratory testing on retained samples as deemed necessary.

Observe all soil drilling and sampling and prepare a log of the boring.

Upon completion of drilling, flush the boring with clear water prior to instrument installation.

#### **C.6 Potholing**

Potholing is defined as use of vacuum excavating or low pressure water jetting and vacuum excavating to advance holes with low risk of utility damage to confirm utility locations or to advance holes for grout pipes or geotechnical instrumentation to depths below utilities of concern. Perform potholing to at least one foot below anticipated utility bottom levels prior to installing piezometers.

#### **C.7 Tremie Grouting**

Perform tremie grouting by pumping grout through a tremie pipe positioned 3 to 5 feet above the bottom of the space to be grouted. Keep the bottom end of the tremie pipe submerged in grout as the grout level is brought up to the ground surface. The density of



the grout flowing from the space at the ground surface shall be the same as the density of the grout being placed. Allow the grout to set for a minimum 12-hour period before additional materials are placed on top of the grout. Top off any settling of grout.

### **C.8 Installing vibrating wire piezometer**

Drill, sample and log borings in soil drilled for the purpose of installing vibrating wire piezometers as specified here in subsection, Soil Drilling and Sampling. Drill borings using 4-inch minimum inside diameter casing and water. Drill the borings so as not to damage adjacent utilities. If use of drilling fluid is necessary to stabilize the borehole, use a biodegradable organic polymeric drilling fluid. Perform a standard penetration test at 5.0-foot depth intervals.

Install the vibrating wire piezometer tip, filter pack, filter pack seal, and annular space seal as determined by contractor's engineer or approved alternatives. The engineer will determine the depth of the sensing zone for each vibrating wire piezometer installed based upon observations of retained soil samples. Withdraw the drill casing in small increments as the backfill materials are placed, so that collapse of the borehole does not occur. Do not rotate casing during withdrawal.

Place filter pack material slowly so that bridging does not occur in the boring and to prevent the instrument from being lifted as the casing is withdrawn. Use a measuring rod or similar device to measure the height of the filter pack to ensure that the filter pack is installed over the proper depth interval. Carefully raise and lower the measuring rod while the filter pack is installed, to prevent bridging and to tamp the filter pack in place.

Place a filter pack seal above the filter pack. Place the filter pack seal in a similar manner as for filter pack material. Place a bentonite seal above the filter pack seal.

Place the annular space seal by tremie grouting. Place the grout in such a manner as to not disturb the integrity of the filter pack and seal.

Grout for the annular space seal for piezometers shall consist of a bentonite to cement ratio of 0.15/1 by weight, with sufficient water to allow pumping. Mix bentonite and water first.

### **C.10 Installing Settlement Guages (SG)**

Install settlement guage(SG) at the locations as shown on the plans.

### **C.11 Schedule of Instruments Installed**

For the retaining wall, install instruments of the number and type, at the location and to the depths indicated on this special provision.

### **C.12 Initial Readings**

Record initial readings for each instrument as described in Embankment Construction. Notify the engineer when initial readings will be made, and the engineer may elect to participate or observe in taking initial readings.

Record initial vibrating wire piezometer readings a minimum of 48 hours after completing installation and testing of each piezometer. Two sets of vibrating wire piezometer readings, at least 4 hours apart will be taken. If the variation in vibrating wire piezometer readings exceeds 0.1 foot, the two sets of readings will be repeated. The arithmetic average of the two sets of vibrating wire piezometer readings that do not vary by more than 0.1 foot will be used as the initial baseline vibrating wire piezometer readings.

Record initial readings of settlement markers a minimum of 24 hours after completing each settlement marker installation. Obtain a minimum of two readings. The arithmetic average of the two initial recorded data readings will be recorded as the initial baseline reading.

### **C.13 Monitoring Instruments**

Obtain and record data readings at regular intervals as specified herein. Submit any newly obtained recorded data to the engineer within 24 hours of obtaining new readings.

After initial readings, obtain and record subsequent regular data readings at each structure or embankment area on regular intervals based on the following criteria:

1. Prior to excavation embankment construction:  
Record a minimum of one reading per week per instrument.
2. During excavation and embankment construction:  
Record one reading per instrument for every 5 feet of vertical retaining wall construction or at least every two days, whichever is the shorter interval.
3. After embankment construction is completed:  
Record a minimum of one reading per instrument every two days.
4. Obtain weekly readings from all settlement gauges for a minimum of three months after embankment backfill placement is complete.

Based on evaluation of the data collected, the engineer will determine if continued instrumentation readings are necessary. If additional readings are necessary, the readings will be obtained by the engineer.

### **C.14 Abandonment of Instrumentation**

At the completion of the job or as directed by the engineer, abandon or remove instrumentation. Grout the full depth of instrument casings and pipes by tremie method or by pressure injection from the ground surface. Grout shall consist of cement and water, with the minimum amount of water necessary to allow pumping.

### **C.15 Protection**

Protect instrumentation and terminal boxes from damage as a result of construction activity. Replace any instrumentation and terminal boxes at the contractor costs. Extend existing settlement gauges as part of this work.

**D Measurement**

The department will measure Geotechnical Instrumentation as a complete single lump sum unit of work, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.001	Geotechnical Instrumentation	LS

Payment is full compensation for providing submittals, furnishing materials, installation, testing, protection, maintenance, replacement or repair of damaged instruments or installations, obtaining data readings, and abandonment.

**82. Cap Well, Item SPV.0105.002.****A Description**

This special provision describes capping the water lines coming from the well on parcel 44 as shown in the plans and as hereinafter provided.

**B (Vacant)****C Construction**

Cut and cap all water lines coming from the well and disconnect the electrical service to the well. Leave existing well structure and equipment intact and in usable condition. Coordinate activities with the Removing Buildings at parcel 44 item in the plans.

**D Measurement**

The department will measure Cap Well by lump sum, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.002	Cap Well	LS

Payment is full compensation for capping all water lines, disconnecting the electrical service, removal and disposal of pipe and wiring, excavation, backfilling, erosion control, site restoration and for furnishing all work, materials, labor and incidentals required to complete the work.

**83. Concrete Pavement Joint Layout, Item SPV.0105.003.****A Description**

This special provision describes designing the joint layout and staking the location of all joints on the project, including mainline, ramps and intersections (traditional and roundabouts) to accommodate the concrete paving operation.

**B (Vacant)**

**C Construction**

Design the joint layout and stake the location of all joints on the project, including mainline, ramps and intersections (traditional and roundabouts), to accommodate the concrete paving operation. Plan and set all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete pavement in accordance to the plans, the American Concrete Pavement Association Intersection Joint Layout Guidelines, and as directed by the engineer. Establish the joint layout in a manner to best-fit field conditions, construction staging, the plan, and as directed by the engineer.

**D Measurement**

The department will measure Concrete Pavement Joint Layout as a single complete lump sum unit of work, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.003	Concrete Pavement Joint Layout	LS

Payment is full compensation for designing the joint layout on the mainline, ramps and all traditional and roundabout intersections; for completing all surveying work necessary to locate all transverse and longitudinal joints; for making adjustments to match field conditions and construction staging.

**84. Concrete Sidewalk 8-Inch, Item SPV.0165.070.**

**A Description**

Perform work in accordance to the applicable provisions of standard spec 602 and as detailed in the plans.

**B (Vacant)**

**C (Vacant)**

**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.0165.070	Concrete Sidewalk 8-Inch	SF

Pavement for concrete sidewalk bid items is full compensation for providing all materials, including concrete, reinforcement, and expansion joints; for preparing the foundation; backfilling and disposing of surplus material; for placing, finishing, protecting, and curing; and restoring the work site.

## **85. Anti-Graffiti Coating, Item SPV.0165.413.**

### **A Description**

This special provision describes furnishing and applying a permanent liquid Anti-Graffiti Coating to the exposed surfaces for the purpose of preventing absorption of paint components into the concrete surfaces.

### **B Materials**

The Anti-Graffiti Coating must be compatible for use on unpainted, stained or painted concrete surfaces. The following products or equal may be used as an Anti-Graffiti Coating:

- a. Anti-graffiti Coating by Sherwin Williams
- b. Permaclean 1496 Matte Finish by TK Products
- c. Duraguard 310 CRU by Chem Masters

### **C Construction**

#### **C.1 Preparation of Concrete Surfaces**

Clean all concrete surfaces that are to be coated to ensure that the surface is free of all laitance, dirt, dust, grease, efflorescence, graffiti and any foreign material in order to accept the coating material according to product requirements. Correct, at contractor expense, any surface problems resulting from the surface preparation methods used.

#### **C.2 Application**

Apply anti-graffiti coating to all concrete surfaces that receive a single stain, multi-stain, and/or architectural surface treatment on all exposed exterior surfaces of structures and MSE walls.

#### **C.3 Test Areas**

Prior to applying anti-graffiti coating to the structure, apply the anti-graffiti coating to a sample panel measuring a minimum of 48-inches x 48-inches and “tag” the panel with spray paint. Demonstrate that graffiti can be removed on the sample panel. Do not apply anti-graffiti coating to any structure until the department approves the test panels.

### **D Measurement**

The department will measure Anti-Graffiti Coating by the square foot, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.413	Anti-Graffiti Coating	SF

Payment is full compensation for furnishing and applying the coating, for concrete surface preparation, and for test panels.

**86. Wall Concrete Panel Mechanically Stabilized Earth LRFD R-56-33, Item SPV.0165.650; R-56-35, Item SPV.0165.651; R-56-36, Item SPV.0165.652.**

**A Description**

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

**B Materials**

**B.1 Proprietary Mechanically Stabilized Earth Concrete Panel Wall Systems**

The supplied wall system must be from the department's approved list of concrete panel mechanically stabilized earth wall systems.

Proprietary wall systems may be used for this work, but must conform to the requirements of this specification and be pre-approved for use by the department's Bureau of Structures, Structures Design Section. The department maintains a list of pre-approved systems of retaining walls. To be eligible for use on this project, a system must have been pre-approved and added to that list prior to the bid opening date. The name of the pre-approved proprietary wall system selected shall be furnished to the engineer within 25 days after the award of contract. The location of the plant manufacturing the concrete panels shall be furnished to the engineer at least 14 days prior to the start of panel production.

To receive pre-approval, the retaining wall system must comply with all pertinent requirements of this provision. Applications for pre-approval may be submitted at any time. Applications must be prepared in accordance to the requirements of Chapter 14 of the department's LRFD Bridge Manual. Information and assistance with the pre-approval process can be obtained by contacting the Structures Design Section in Room 601 of the Hill Farms State Transportation Building in Madison or by calling (608) 266-8494.

**B.2 Design Requirements**

It is the responsibility of the contractor to supply a design and supporting documentation as required by this special provision, for review by the department, to show the proposed wall design is in compliance with the design specifications.

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

The design shall be in compliance with the *AASHTO LRFD Bridge Design Specifications 5<sup>th</sup> Edition 2010*, (AASHTO LRFD) with latest interim specifications for Mechanically Stabilized Earth Walls, WisDOT's current *Standard Specifications for Highway and Structure Construction* (Standard Specifications), Chapter 14 of the WisDOT LRFD Bridge Manual and standard engineering design procedures as determined by the department. Loads, load combinations, load and resistance factors shall be as specified in AASHTO LRFD Section 11. The associated resistance factors shall be defined in accordance to Table 11.5.6-1 LRFD.

Design and construct the walls in accordance to the lines, grades, heights and dimensions shown on the plans, as herein specified, and as directed by the engineer. Where wall or wall sections intersect with an included angle of 130 degrees or less, a vertical corner element separate from the standard panel face shall abut and interact with the opposing standard panels. The corner element shall have ground reinforcement connected specifically to that panel and shall be designed to preclude lateral spread of the intersecting panels. If the wall is installed in front of a bridge abutment or wing, it shall also be designed to resist the applied abutment/bridge lateral forces specified on the contract plans.

Walls parallel to supporting highway traffic shall be designed for the effects of highway surcharge loading equivalent of 2 feet soil surcharge weight or 240 psf. The design shall also consider the traffic barrier impact where applicable. Walls that do not carry highway traffic shall be designed for a live load surcharge of 100 psf in accordance to Chapter 14 of the WisDOT LRFD Bridge Manual or as stated on the plans.

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

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

The design of the Wall Concrete Panel Mechanically Stabilized Earth by the contractor shall consider the internal and compound stability of the wall mass in accordance to AASHTO LRFD 11.10.6. The internal stability shall include soil reinforcement pullout,

soil reinforcement rupture, and panel-reinforcement connection failure at each soil reinforcement level. The design shall be performed using the Simplified Method or Coherent Gravity Method. Calculations for factored stresses and resistances shall be based upon assumed conditions at the end of the design life. Compound stability shall be computed for the applicable strength limits.

Facing panels shall meet the design requirements of AASHTO LRFD 11.10.2.3. The Facing panels shall also be designed to resist compaction stresses that occur during the wall erection. The minimum thickness of the Facing panel shall be 5.5 inches. The surface area of a standard single panel cannot exceed 60 square feet. The maximum height of a standard panel shall be 5 feet. The top and bottom panels may exceed 5 foot in height based on site topography subject to the approval by the Structures Design Section. The design of the steel reinforcement within the panels shall be based on one-way bending action. Design the wall panels and joints between panels to accommodate a maximum differential settlement of 1 foot over a 100-foot length, unless the plans indicate other.

The minimum length of soil reinforcement measured from the back face of the wall shall be equal to 0.7 the wall height or as shown on the plan. In no case shall this length be less than 8 feet. The soil reinforcement length shall be the same from the bottom to the top of the wall. The soil reinforcement shall extend a minimum of 3.0 feet beyond the theoretical failure plane in all cases. The maximum vertical spacing of soil reinforcement layers shall be 31 inches. The uppermost layer of the reinforcement shall be located a minimum of 6 inches below the bottom of an overlying slab, footing or top of the wall. The upper layers of the soil reinforcement shall also be checked to verify that they have sufficient tensile resistance against traffic barrier impact where applicable.

All soil reinforcement steel required for the reinforced soil zone shall be connected to the face panels. The reinforcement and the reinforcement/facing connection strength shall be designed to resist maximum factored reinforcement loads in accordance to AASHTO LRFD Section 11.10.6. Facing connection strength shall be defined as the resistance factor times the failure load or the load at 0.5 inch deformation times 0.9, whichever is less. The nominal long term design strength in steel reinforcement and connections shall be based upon assumed conditions at the end of the design life.

Soil reinforcement shall be prefabricated into single or multiple elements before galvanizing. Soil reinforcement shall be fabricated or designed to avoid piling, drainage structures or other obstacles in the fill without field modifications. Cutting or altering of the basic structural section of either the strip or grid at the site is prohibited unless approved by the Structures Design Section. A minimum clearance of 3" shall be maintained between any obstruction and reinforcement unless otherwise approved. Splicing steel reinforcement is not allowed unless approved by the Structures Design Section.



MSE facing panels shall be installed on concrete leveling pads. The minimum cross section of the leveling pad shall be 6-inches deep by 1-foot wide. Potential depth of frost penetration at the wall location shall not be considered in designing the wall for depth of leveling pad.

Submit the following to the engineer for review: complete design calculations, explanatory notes, supporting materials, specifications, and detailed plans and shop drawings for the proposed wall system. Sample analyses and hand output shall be submitted to verify the output by the software. The design calculations and notes shall clearly indicate the Capacity to Demand Ratios (CDR) for all internal stabilities as defined in AASHTO LRFD.

The wall submittal package shall be submitted electronically to the engineer and Structures Design Section. Submit all required information no later than 30 days prior to beginning construction of the wall. The detailed plans and shop drawings shall include all details, dimensions, quantities and cross-sections necessary to construct the walls.

### **B.3 Wall System Components**

Materials furnished for wall system components under this contract shall conform to the requirements of this specification. All certifications related to material and components of the wall systems specified in this subsection shall be submitted to the engineer.

#### **B.3.1 General**

The walls shall have modular precast concrete face panels produced by a wet cast process, and have cast-in-place concrete pads or footings. The concrete panels shall have a minimum strength of 4000 psi at 28 days. The panel edges shall be configured so as to conceal the joints. The detail shall be a shiplap, tongue and groove or other detail adequate to prevent vandalism or ultraviolet light damage to the backside of the wall joint covering. Joints between panels shall be no more than 0.75 inch. Use full wall height slip joints at points of differential settlement when detailed on the plan. Horizontal joints must be provided with a compressible bearing material to prevent concrete to concrete contact.

A minimum of two bearing pads shall be used per panel. The allowable bearing stress shall not exceed 900 psi. The bearing pads shall be either preformed EPDM rubber conforming to ASTM D-2000, Grade 2, Type A, Class A with a minimum Durometer Hardness of 80 or high-density polyethylene pads with a minimum density of 0.034 lb/in<sup>3</sup> in accordance to ASTM 1505.

An 18-inch wide geotextile shall be used on the backface of the wall panels to cover all panel joints. The geotextile shall meet the physical requirements stated in standard spec 645.2.4 for Geotextile Fabric, Type DF, Schedule B, except that the grab tensile strength shall be a minimum of 180 pounds in both the machine and cross-machine directions. The geotextile shall be attached with a standard construction adhesive suitable for use on concrete surfaces and cold temperatures. The adhesive shall be applied to the panels, not to the geotextile.

All steel portions of the wall system exposed to earth shall be galvanized. All soil reinforcement and attachment devices shall be carefully inspected to ensure they are true size and free from defects that may impair the strength and durability.

For cast in place sections of cap and coping use poured concrete masonry Grade A, A-FA, A-S, A-T, A-IS or A-IP concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for cast in place cap and coping concrete as specified in standard spec 716, Class II Concrete.

Use a wall leveling pad that consists of poured concrete masonry , Grade A, A-FA, A-S, A-T, A-IS or A-IP concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for leveling pad concrete as specified in standard spec 716, Class II Concrete.

The minimum embedment to the top of the leveling pad shall be 1 foot 6 inches or as given on the plan or given in AASHTO LRFD 11.10.2.2 whichever is greater. Step the leveling pad to follow the general slope of the ground line. The leveling pad's steps shall keep the bottom of the wall within one half the panel heights of the minimum embedment i.e. the minimum embedment plus up to one half the height of one panel. Additional embedment may be detailed by the contractor but will not be measured for payment.

### **B.3.2 Backfill**

Furnish and place backfill for mechanically stabilized earth concrete panel walls as shown on the plans and as hereinafter provided.

Provide and use backfill that consists of natural sand or a mixture of sand with gravel, crushed gravel or crushed stone. It shall not contain recycled or milled asphalt, recycled concrete, foundry sand, bottom ash, blast furnace slag or other potentially corrosive material.

Provide material conforming to the following gradation requirements as per AASHTO T27.

<b>Sieve Size</b>	<b>Percentage by Weight Passing</b>
1 inch	100
No. 40	0 - 60
No. 200	0 - 15

The material shall have a liquid limit not greater than 25, as per AASHTO T89, and a plasticity index not greater than 6, as per AASHTO T90. In addition, backfill material shall meet the following requirements.

<b>Test</b>	<b>Method</b>	<b>Value</b>
pH	AASHTO T-289	5 – 10.0
Sulfate content	AASHTO T-290	200 ppm max.
Chloride content	AASHTO T-291	100 ppm max.
Electrical Resistivity	AASHTO T-288	3000 ohm/cm min.
Organic Content	AASHTO T-267	1.0% max.
Angle of Internal Friction	AASHTO T-236	30 degrees min.

Prior to placement of the backfill, obtain and furnish to the engineer a current certified report of test results that the backfill material complies with the requirements of this specification. This certified report of test shall be less than 6 months old. Tests will be performed by a certified independent laboratory. When backfill characteristics and/or sources change, a certified report of tests will be provided for the new backfill material.

## **C Construction**

### **C.1 Excavation and Backfill**

Excavation will encompass the preparation of the foundation for the leveling pad and the reinforcing strips in accordance to standard spec 206. The volume of excavation covered includes all excavation required to install the wall as shown on the plans. At the end of each working day, provide good temporary drainage such that the backfill shall not become contaminated with run-off soil or water if it should rain. Do not stockpile or store materials or large equipment within 10 feet of the back of the wall. Compact all backfill behind the wall as specified in standard spec 207.3.6.

Backfill placement shall closely follow the erection of each course of panels. Compact the backfill to 95.0% of maximum density as determined by AASHTO T-99, Method C. Compaction of backfill within 3 feet of the back face of the wall should be accomplished using lightweight compaction devices. Use of heavy compaction equipment or vehicles should be avoided within 3 feet of the panels.

Perform compaction testing on the backfill. When performing nuclear testing, use a nuclear gauge from the department's approved list, ensure that the operator is a HTCP certified Nuclear Density Technician I, and conform to CMM 8.15 for testing and gauge monitoring methods. Conduct testing at a minimum frequency of 1 test per 2 feet of vertical wall height, per 200 feet length of wall, or major portion thereof. At least one test for every 2-foot of vertical wall height is required. Test sites will be selected using ASTM Method D3665. Deliver documentation of all compaction testing results to the engineer at the time of testing. The cost of compaction testing shall be considered incidental to the cost of the wall.

Place and compact the MSE backfill to the level of the next higher layer of MSE reinforcement before placing the MSE reinforcement or connecting it to the wall facing. The MSE reinforcement shall lay horizontally on top of the most recently placed and compacted layer of MSE backfill. Bending of MSE reinforcement that result in a kink in the reinforcement shall not be allowed. If skewing of the reinforcement is required due to obstruction in the reinforced fill, the maximum skew angle shall not exceed 15 degrees

from the normal position unless a greater skew angle is shown on the plans. The adequacy of the skewed reinforcement in such a case shall be addressed by supporting calculations.

### **C.2 Panel Tolerances**

As backfill material is placed behind a panel, maintain the panel in its proper inclined position according to the supplier specifications and as approved by the engineer. The supplier shall specify the back batter so that the final position of the wall is vertical. Vertical tolerances and horizontal alignment tolerances shall not exceed 3/4-inch when measured along a 10-foot straight edge. The maximum allowable offset in any panel joint shall be 3/4-inch. The overall vertical tolerance of the wall (plumbness from top to bottom) shall not exceed 1/2-inch per 10 feet of wall height. Erect the precast face panels to ensure that they are located within 1 inch from the contract plan offset at any location to ensure proper wall location at the top of the wall. Provide a 3/4-inch joint separation between all adjacent face panels to prevent direct concrete-to-concrete contact. Maintain this gap by the use of bearing pads and/or alignment pins. Failure to meet this tolerance may cause the engineer to require the contractor to disassemble and re-erect the affected portions of the wall. In addition, imperfect molding, honeycombing, cracking or severe chipping of panels shall be cause of panel rejection.

### **C.3 Geotechnical Information**

Geotechnical data to be used in the design of the wall is given on the wall plan. After completing wall excavation of the entire reinforced soil zone, notify the department and allow the Regional Soils Engineer two working days to review the foundation.

### **C.4 Name Plates**

Furnish and install name plates conforming to the requirements of standard spec 506.2.4. at the locations the plans show. Embed or epoxy the plate lugs in the concrete.

Compensation for furnishing and placing of name plates shall be included in the contract price for Wall Concrete Panel Mechanically Stabilized Earth LRFD (structure) and no additional compensation therefore will be allowed.

### **D Measurement**

The department will measure Wall Concrete Panel Mechanically Stabilized Earth LRFD in area by the square foot, acceptably completed, measured as the vertical area within the pay limits the contract plans show. No other measurement of quantities shall be made in the field. Unless the engineer directs in writing, a change to the limits indicated on the contract plan, wall area constructed above or below these limits will not be measured for payment.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.650	Wall Concrete Panel Mechanically Stabilized Earth LRFD R-56-33	SF
SPV.0165.651	Wall Concrete Panel Mechanically Stabilized Earth LRFD R-56-35	SF
SPV.0165.652	Wall Concrete Panel Mechanically Stabilized Earth LRFD R-56-36	SF

Payment is full compensation for supplying a design and shop drawings; preparing the site, including all necessary excavation and disposal of materials; supplying all necessary wall components to produce a functional system including concrete masonry and steel reinforcing for cap and copings; constructing the retaining system and drainage system; providing backfill, backfilling, compacting, performing compaction testing; performing QMP testing; and for name plates. Parapets, railings, abutment bodies and other items above the wall cap or coping will be paid for separately. Vehicle barrier and its support will be paid separately.

Any required topsoil, fertilizer, seeding or sodding and mulch will be paid for at the contract unit price of topsoil, fertilizer, seeding or sodding and mulch, respectively.

## **87. Shredded Hardwood Bark Mulch, Item SPV.0180.400.**

### **A Description**

This special provision describes furnishing and installing Shredded Hardwood Bark Mulch at the locations shown on the plans and in accordance to the requirements of standard spec 632, the plans, and as hereinafter provided.

### **B Materials**

Provide Shredded Hardwood Bark Mulch, as shown on plan and in accordance to standard spec 632.2.6.

Provide Shredded Hardwood Bark Mulch for mulch rings around the base of plant material that is finely shredded hardwood bark mulch and the product of a mechanical chipper, hammermill, or tub grinder. Ensure the material is fibrous and uniformly dark brown in color, free of large wood chunks, and substantially free of mold, dirt, sawdust, and foreign material. Ensure that no portion of the material is in an advanced state of decomposition. Ensure that the material does not contain chipped up manufactured boards or chemically treated wood, including but not limited to wafer board, particle board, and chromated copper arsenate (CCA) or penta-treated wood. Ensure that the material does not contain no bark of the black walnut tree. Ensure that the material, when air dried, all passes a 4-inch screen and no more than 20 percent by mass of the material passes a 0.10-inch sieve. Ensure that unattached bark or greenleaf composition, either singly or combined, does not exceed 20 percent each by mass. The maximum length of individual pieces cannot exceed 4 inches.

### **C Construction**

Install mulch in accordance to standard spec 632.3.9 to a depth of 3 inches over entire area of bed.

Install mulch in rings around the base of plant material planted in non-bed areas to the widths indicated in the Plant Data Table.

Do not use any weed barrier fabric in bark mulch areas.

Place the hardwood bark mulch in such a manner as to not damage plants or other landscape materials or pavements already in place.

### **D Measurement**

The department will measure Shredded Hardwood Bark Mulch by the square yard, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.400	Shredded Hardwood Bark Mulch	SY

Payment is full compensation for furnishing and installing all materials.

## **88. Colored and Stamped Concrete 5-Inch, Item SPV.0180.414.**

### **A Description**

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

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

Concrete shall conform to the requirements in this section and in referenced standard specs 405, 415 and 416.

### **B Materials**

#### **B.1 Concrete**

Provide integrally colored red concrete per standard spec 405.2.1.

#### **B.2 Concrete Curing**

Provide curing compound per standard spec 405.2.2.

#### **B.3 Admixtures**

Provide admixtures per standard spec 405.2.3.

## **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.

Conform to standard spec 405.2.4.2 and provide to engineer for review and approval those items indicated in this Section.

Engineer can provide photographic example at contractor's request as to the general pattern and coloring desired for this project. Engineer will need to contact the project landscape architect to obtain the photograph, therefore the contractor should allow a minimum of five business days for the request to be processed and the example to be provided.

### **B.4.2 Test Panels**

At an engineer-determined location on the project, place and finish a 6-foot by 6-foot by 5-inch colored concrete test panel using processes and techniques intended for use on permanent work, including curing procedures, stamping, coloring and sealing. Produce test panels using the same workers who will perform the contract work. Retain samples of cements, sands, aggregates and color additives used in test panels for comparison with materials used in remaining work. For an accurate representation of the desired color or color intensity, produce the colored concrete for the test panel in a minimum batch size of 2 cubic yards or in full cubic yard increments for batch sized greater than 2 cubic yards. Discard excess material.

The engineer will determine acceptance of the test panel color based on review and approval by the department and the local municipal representatives. Test panel color will be evaluated for approval no earlier than 5 days after the test panel was poured and sealed.

Prepare the concrete surfaces of the colored concrete pavement test panel using the same methods and materials outlined in this section.

## **B.5 Stamp**

Use reusable elastomeric/urethane form liners of the architectural surface treatment(s) as detailed in the plans and hereinafter provided.

Pattern shall be herringbone brick pattern with individual brick dimensions of 2 1/4" to 2 3/8" by 7 5/8" to 8". Maximum relief of the brick formliner shall be 1/2". Provide sample formliner pattern to engineer for approval before use.

Orientation shall be parallel to the roadway. Contractor shall confirm orientation with engineer for each separate area or application area (median, roundabout, etc) prior to placing any roadway concrete for the project.

## **B.6 Antiquing Release Agent**

Use an antiquing release agent that is compatible with the form liner and coloring materials.

The antiquing release agent color shall be light to medium grey and shall closely match to Federal Standard 595 Color Server, FS color 34086.

Provide manufacturer's color chart for antiquing release agents to engineer for approval before use.

### **B.7 Concrete Sealant**

Use concrete sealants that are compatible with the form liner and installation methods.

Prime Sealant: Glossy.

Secondary Sealant: Matte.

## **C Construction**

Construct colored concrete in accordance to standard specs 405 and 416 and as herein provided.

Coordinate locations of permanent signage requiring PVC pipe box outs per standard spec 634.3.2.

### **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**

Construct work in accordance to standard spec 405.3

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 per manufacturer's written recommendations to achieve desired finish as provided in photographic example and as accepted by test panel review and approval process.

### **C.3 Form Liner (Stamp) Preparation**

Clean the form liner prior to each pour and ensure that it is free of any build-up. Visually inspect each liner for blemishes or tears, and repair if necessary per manufacturer's recommendations.

### **C.4 Stamp**

Coordinate with the engineer and to verify stamping pattern orientation prior to starting the stamping work for each separate area to be constructed.



Prepare stamp tools with a full, smooth coat of antiquing release agent.

While concrete is still in the plastic state, apply imprinting tools to the surface and press into the concrete to create the desired impression. Finish all surfaces uniformly.

Ensure that the textured surface is free of laitance; sandblasting is not permitted. Grind or fill any blemishes.

The contractor may need to hand apply, shake or spray additional antiquing release agent over concrete surface to achieve the desired result and match approved mock-up.

### **C.5 Finishing**

Allow concrete to cure for 24 hours after application of the antiquing release agents and stamp pattern.

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

Ensure that concrete is clean and dry before proceeding with concrete sealant.

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 placement.

Remove and legally dispose of off-site the test slabs or sample panels not permanently incorporated into the work and restore the site after the engineer determines the test slab is no longer needed.

### **D Measurement**

The department will measure Colored and Stamped Concrete 5-Inch by the cubic yard acceptably completed and successfully integrated with the pavement work done under other contract bid items.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.414	Colored and Stamped Concrete 5-Inch	SY

Payment is full compensation for preparing the foundation, unless provided otherwise; for developing mix designs and providing sample panels or test panels; for furnishing materials (including concrete masonry, colored pigments, sealers, joint and bond breakers,

and retarders); for hauling, preparing, placing, curing, and protecting the concrete; for any special construction procedures required to complete the work; for applying antiquing release agent and stamping; for sawing required for construction of colored concrete; for jointing and joint materials, and tie bars; for measuring opening strength including fabricating and testing cylinders, obtaining and testing cores, and evaluating maturity; and for furnishing all removal of excess colored concrete, including test slabs or sample panels and properly and legally disposing of the waste material.

## **89. Slope Paving, Crushed Aggregate, Special, SPV.0180.417.**

### **A Description**

This special provision describes applying slope paving crushed aggregate to embankment slopes, as shown in the plans, for control and prevention of erosion of the embankments.

### **B Materials**

Conform to standard spec 604.2 with the following additions/changes:

Provide aggregate that consists of crushed quartzite, commonly referred to in the project area as “Pink Lady Quartzite.” Provide aggregate which conforms to the gradation requirements of size No. 2 of coarse aggregate for concrete masonry or as approved by the engineer.

Provide a five gallon sample of the quartzite and a separate 2 foot by 2 foot by 6 inch (L x W x D) sample panel with the binder material applied to the aggregate to the engineer for approval. The department will accept the quartzite and binder based on comparison to a WisDOT sample available for viewing at the WisDOT Regional office.

Provide a binder that is low-modulus, medium-viscosity, 2-component epoxy resin conforming to ASTM C-881 and AASHTO M-235 specifications and the following requirements:

Total Water absorption (ASTM D-570)

7 day: 1.3% (2 hour Boil)

14 day: 0.23% (24 hour Immersion)

Color: Clear to light amber

Viscosity: 2,500 cps

### **C Quality Assurance**

The manufacturer of the specified product shall be ISO 9001/9002 certified and have in existence a recognized ongoing quality assurance program independently audited on a regular basis.

Be qualified in the field of concrete repair and protection with a successful track record of five years or more. Maintain qualified personnel who have received product training by a manufacturer’s representative.

Install materials in accordance to all manufacturer requirements or as directed by the engineer. Consult Material Safety Data Sheets for complete handling recommendations.

#### **D Construction**

Conform to standard spec 604.3, except the second paragraph of standard spec 604.3.2 shall be altered to read:

Construct the work at the locations and to the elevation, lines, grades, depth and cross sections indicated on the plans and directed by the engineer.

The application surface shall be clean and sound, and free of standing water, dust, grease, waxes, and any other contaminants.

Apply the binder in accordance to the manufacturer's directions, uniformly over the surface of the aggregate at a rate just sufficient to assure penetration and binding of the aggregate in the upper 4 inches of the aggregate blanket. Apply the binder utilizing a two part sprayer with mixing completed at the nozzle. Avoid excessive application of the binder material. Take care to prevent run-off of such material. Protect the surface of adjacent structures, including but not limited to, sidewalks, curb and gutter, bridges, retaining walls, to prevent them from being splattered or discolored with binder material.

#### **D.1 Field Test Section**

Upon engineer approval of the aggregate and binder sample as noted above, construct a field test section. Notify the engineer 7 days in advance by providing the dates and times for field test section construction.

At an engineer-determined location on the project construct a field test section. Place and finish a 10 foot by 10 foot by 6-inch field test panel using processes and techniques intended for use on permanent work, including application procedures. Produce the field test section using the same workers who will perform the contract work. Retain samples of aggregates, binders and any additives used in the field test section for comparison with materials used in remaining work. Dispose of excess material.

The engineer will determine acceptance of the test section color and binder penetration by comparing the field test panel to the contractor's previously supplied sample. Upon acceptance from the engineer, the field test section will act as the visual quality standard for the finished permanent work. Remove the field test section as directed by the engineer.

Have a binder material manufacturer representative on site during the entire field test section process to supervise and provide guidance to the contractor for the binder application. The contractor and manufacturer representative shall inform the engineer of the proper permanent field application process at the completion of the field test section and shall document the final process, including but not limited to, application rates, sprayer type, pot life, cleaning procedures, weather conditions at time of application, and all applicable application techniques in writing to the engineer at least seven days in advance of any permanent field applications.

Submit to the engineer any revisions to subsection D.1 for the final field application to the permanent work.

**E Measurement**

The department will measure Slope Paving, Crushed Aggregate, Special by the square yard of work, acceptably completed.

**F Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.417	Slope Paving, Crushed Aggregate, Special	SY

Payment is full compensation for excavation and backfilling required for preparation of the aggregate foundation; for providing sample and test section materials; disposal of surplus materials and test section materials; for protecting adjacent structures; furnishing, handling, placing, and consolidating the crushed aggregate; and for furnishing, handling, mixing and applying the binder material.

**90. Limestone Screenings, Item SPV.0195.400.**

**A Description**

This special provision consists of a surface course as described below, and constructed on the prepared foundation in accordance to the specifications and in reasonably close conformity with the lines, grades, thicknesses, and typical cross-sections shown on the plans or established by the engineer.

**B Materials**

Compact a six inch (as specified on plans) layer of crushed limestone screenings which conform to the following gradation requirements:

Sieve Size	% by Weight Passing
1/2-inch	100
3/8-inch	65-92
No. 4	45-75
No. 8	30-55
No. 30	15-35
No. 50	10-25
No. 200	5-10

**C Construction**

Construct Limestone Screenings in accordance to standard spec 305.3. In addition, compact the Limestone Screening at a minimum of 90 percent Modified Proctor.

**D Measurement**

The department will measure Limestone Screenings by the ton, 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.0195.400	Limestone Screenings	TON

Payment is full compensation for furnishing, placing, and compacting limestone screenings.

**91. Sanitary Manhole, Item SPV.0200.450.****A Description**

This special provision describes sanitary sewer manhole, as shown on the plans, in accordance to the pertinent provisions of standard spec 611, conforming to the requirements in the separate special provision entitled "General Requirements for Sanitary Sewer and Water", and as hereinafter provided.

**B (Vacant)****C Construction**

Provide pre-cast structure shop drawings to engineer prior to fabrication or installation. Provide adjustment rings and adjust the manhole casting to the finished grade provided by the engineer.

**D Measurement**

The department will measure Sanitary Manhole, in height by vertical foot, completed and accepted. This measurement equals the distance from the flowline of the manhole to the top of the manhole cover at finish grade.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0200.450	Sanitary Manhole	VF

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals, necessary to complete the contract work, and for excavating, backfilling, compaction, and final adjustment of the manhole casting to finished grade.

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**ADDITIONAL SPECIAL PROVISION 1 (ASP 1)  
FOR TRANSPORTATION ALLIANCE FOR NEW SOLUTIONS (TrANS)  
PROGRAM EMPLOYMENT PLACEMENTS AND APPRENTICESHIPS**

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The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Section 5204(e) – Surface Transportation Workforce Development Training and Education, provides for 100 percent Federal funding if the core program funds are used for training, education, or workforce development purposes, including “pipeline” activities. The core programs includes: Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Highway Bridge Program (HBP), Interstate Maintenance (IM), National Highway System (NHS), and Surface Transportation Program (STP). These workforce development activities cover surface transportation workers, including OJT/SS programs for women and minorities as authorized in 23 U.S.C. §140(b).

*TrANS* is an employment program originally established in 1995 in Southeastern Wisconsin. Currently TrANS has expanded to include TrANS program locations to serve contractors in Southeast (Milwaukee and surrounding counties), Southcentral (Dane County and surrounding counties including Rock County), and most Northeastern Wisconsin counties from locations in Keshena, Rhinelander and surrounding far Northern areas. TrANS attempts to meet contractor’s needs in other geographic locations as possible. It is an industry driven plan of services to address the outreach, preparation, placement and retention of women, minorities and non-minorities as laborers and apprentices in the highway skilled trades. These candidate preparation and contractor coordination services are provided by community based organizations. For a list of the TrANS Coordinators contact the Disadvantaged Business Enterprise Office at (414) 438-4583 in Milwaukee or (608) 266-6961 in Madison. These services are provided to you at no cost.

***I. BASIC CONCEPTS***

Training reimbursements to employing contractors for new placements, rehires or promotions to apprentice of TrANS Program graduates will be made as follows:

- 1) **On-the-Job Training, Item ASP.1T0G, ASP 1 Graduate.** At the rate of \$5.00 per hour on federal aid projects when TrANS graduates are initially hired, or seasonally rehired, as unskilled laborers or the equivalent.

Eligibility and Duration: To the employing contractor, for up to 2000 hours from the point of initial hire as a TrANS program placement.

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that 12 (number) TrANS Graduate(s) be utilized on this contract.

- 2) **On-the-Job Training, Item ASP.1T0A, ASP 1 Apprentice.** At the rate of \$5.00 per hour on federal aid projects at the point when an employee who came out of the TrANS Program is subsequently entered into an apprenticeship contract in an underutilized skilled trade (this will include the Skilled Laborer Apprenticeship when that standard is implemented).

Eligibility and Duration: To the employing contractor, for the length of time the TrANS graduate is in apprentice status.

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that 7 (number) TrANS Apprentice(s) be utilized on this contract.

- 3) The maximum duration of reimbursement is two years as a TrANS graduate plus time in apprentice status.
- 4) If a TrANS program is not available in the contractor's area and another training program is utilized, payment of On-the-Job Training hours may be approved by the Wisconsin Department of Transportation (WisDOT) if the training program meets the established acceptance criteria. Only On-the-Job Training Hours accumulated after WisDOT approval will be reimbursed as specified under Items ASP.1T0G and ASP.1T0A. For more information, contact the Disadvantaged Business Enterprise Office at the phone numbers listed above.
- 5) WisDOT reserves the right to deny payments under items ASP.1T0G and ASP.1T0A if the contractor either fails to provide training or there is evidence of a lack of good faith in meeting the requirements of this training special provision.

## ***I. RATIONALE AND SPECIAL NOTE***

The \$5.00 per hour now being paid for TrANS placements is intended to cover the duration of two years to allow for reaching entry-level laborer status. An additional incentive, the \$5.00 rate, would promote movement into the underutilized skilled trades' apprenticeships and applies until the individual completes their apprenticeship. These incentives benefit TrANS candidates by giving them a better opportunity to enter a skilled trade; benefits contractors who will be assisted in meeting their EEO profiles and goals; and benefits the public who will see the program reinforce larger public-private employment reform in Wisconsin. The pool of TrANS graduates was created for the purpose of addressing underutilization in the skilled trades, an objective that is further reinforced by a parallel retention pilot program, known as the Companywide Reporting. *Whether or not reimbursement is involved, the WisDOT reassures contractors who are in the Companywide Program that TrANS placements still contribute toward fulfilling the new hire goal of 50% women and minorities.* Based on data administered by United States Department of Labor (US DOL), the highway skilled trades remain underutilized for women statewide (less than 6.9%); and for minorities in all counties (% varies by county).

NOTE: *Unless using other advancement strategies, contractors are encouraged to use some or all of this monetary incentive to offset the cut in hourly wages an individual may incur when entering an apprenticeship if the full general laborer hourly rate has been previously paid. No special accounting measures are required.*

## ***II. IMPLEMENTATION***

The implementation of ASP 1 is intended to cover only the amount of time it takes for underutilization to be resolved across the trades. This will be measured annually at the county and/or state levels using data administered by WisDWD in relation to goals set by the USDOL-

OFCCP. With appropriate state and federal approvals, we may also do some measurement at the company level.

It is the contractor's responsibility to note on their Certified Payrolls if their employee is a TrANS graduate or a TrANS apprentice. The District EEO Coordinators utilize the information on the Certified Payrolls to track the hours accumulated by TrANS Graduates and TrANS apprentices on WisDOT contracts. Payment under this ASP 1 is made based on the hours recorded off of the Certified Payrolls. Tracking may eventually include improved linkages with the WisDWD apprentice database, information from company and committee level sources.

TrANS is nondiscriminatory by regulation, and is a tool for optional use by contractors to address the underutilization of women and minorities as laborers and apprentices in our industry's skilled trades.

#### **IV. TRANS TRAINING**

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided to employees enrolled in apprenticeship and on-the-job training programs as follows:

The contractor shall provide on-the-job training aimed at developing full journey workers in the type of trade or job classifications involved. In the event the contractor subcontracts a portion of the contract work, the contractor shall determine how many, if any, of the trainees are to be trained by the subcontractor provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract.

Training and upgrading of minorities and women toward journey workers status is a primary objective of this training special provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority trainees and women trainees); to the extent such persons are available within a reasonable area of recruitment. The contractor will be given an opportunity and will be responsible for demonstrating the steps that they have taken in pursuance thereof, prior to determination as to whether the contractor is in compliance with this training special provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey workers status or in which they have been employed as a journey worker. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

#### **V. APPRENTICESHIP TRAINING**

The Federal Highway Administration's (FHWA) policy is to require full use of all available training and skill improvement opportunities to assure increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The FHWA On-the-Job Training (OJT) Program requires the State transportation agencies (STAs) to establish apprenticeships and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical underrepresentation of members of these groups in highway construction skilled crafts.



The OJT Supportive Services (OJT/SS) Program was established in Title 23 Code of Federal Regulations (CFR), Part 230) to supplement the OJT program and support STA training programs by providing services to highway construction contractors and assistance to highway construction apprentices and trainees. The primary objectives of OJT/SS are:

- (1) To increase the overall effectiveness of the State highway agencies' approved training programs.
- (2) To seek other ways to increase the training opportunities for women, minorities, and disadvantaged individuals.

The STAs are responsible for establishing procedures, subject to the availability of Surface Transportation and Bridge Funds under 23 U.S.C. §140(b) (Nondiscrimination), for the provision of supportive services with respect to training programs approved under 23 CFR, Part 230(a) (Equal Employment Opportunity on Federal and Federal-aid Construction Contracts – including Supportive Services).

The contractor and subcontractor shall maintain records to demonstrate compliance with these apprenticeship requirements. Reasonable exemptions and modifications to and from any or all of these requirements will be determined by the Wisconsin Department of Transportation-Civil Rights Office. A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT Civil Rights Office, 4802 Sheboygan Avenue, P.O. Box 7965, Rm. 451, Madison, WI 53707.

### ADDITIONAL SPECIAL PROVISION 3 DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

#### 1. Description

##### General

- a. The disadvantaged business enterprise (DBE) requirements of 49 CFR Part 26 apply to this contract. The department's DBE goal is shown on the cover of the bidding proposal. The contractor can meet the specified contract DBE goal by procuring services or materials from a DBE or by subcontracting work to a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.
- b. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:
  - i. Produce accurate and complete quotes.
  - ii. Understand highway plans applicable to their work.
  - iii. Understand specifications and contract requirements applicable to their work.
  - iv. Understand contracting reporting requirements.
- c. The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.
- d. For information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:

<http://www.dot.wisconsin.gov/business/engrserv/dbe-main.htm>

#### 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](mailto: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 at <http://app.mylcm.com/wisdot/Reports/WisDotUCPDirectory.aspx>
- 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 at

<http://www.dot.wisconsin.gov/business/engrserv/docs/dbe-trucking-notice.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://www.dot.wi.gov/business/dbe/docs/policyreplacingdbe.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*

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GFW SAMPLE MEMORANDUM

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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

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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](mailto: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**

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

- Ø DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Ø Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Ø Review the status of contracts on the HCCI website reviewing the ‘apparent low bidder’ list, and bid tabs at a minimum.
- Ø 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.
- Ø Participate in DBE office assessment programs
- Ø Participate on advisory and mega-project committees
- Ø Sign up to receive the DBE Contracting Update
- Ø Consider membership in relevant industry or contractor organizations
- Ø 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 PROVISIONS 5****Fuel Cost Adjustment****A Description**

Fuel Cost Adjustments will be applied to partial and final payments for work items categorized in Section B as a payment to the contractor or a credit to the department. ASP-5 shall not apply to any force account work.

**B Categories of Work Items**

The following items and Fuel Usage Factors shall be used to determine Fuel Cost Adjustments:

(1) Earthwork.		Unit	Gal. Fuel Per Unit
205.0100	Excavation Common	CY	0.23
205.0200	Excavation Rock	CY	0.39
205.0400	Excavation Marsh	CY	0.29
208.0100	Borrow	CY	0.23
208.1100	Select Borrow	CY	0.23
209.0100	Backfill Granular	CY	0.23
350.0102	Subbase	CY	0.28
350.0104	Subbase	Ton	0.14
350.0115	Subbase 6-Inch	SY	0.05
350.0120	Subbase 7-Inch	SY	0.05
350.0125	Subbase 8-Inch	SY	0.06
350.0130	Subbase 9-Inch	SY	0.07
350.0135	Subbase 10-Inch	SY	0.08
350.0140	Subbase 11-Inch	SY	0.09
350.0145	Subbase 12-Inch	SY	0.09

**C Fuel Index**

A Current Fuel Index (CFI) in dollars per gallon will be established by the Department of Transportation for each month. The CFI will be the price of No. 2 fuel oil, as reported in U.S. Oil Week, using the first issue dated that month. The CFI will be the average of prices quoted for Green Bay, Madison, Milwaukee and Minneapolis.

The base Fuel Index (BFI) for this contract is \$2.90 per gallon.

#### **D Computing the Fuel Cost Adjustment**

The engineer will compute the ratio CFI/BFI each month. If the ratio falls between 0.85 and 1.15, inclusive, no fuel adjustment will be made for that month. If the ratio is less than 0.85 a credit to the department will be computed. If the ratio is greater than 1.15 additional payment to the contractor will be computed. Credit or additional payment will be computed as follows:

- (1) The engineer will estimate the quantity of work done in that month under each of the contract items categorized in Section B.
- (2) The engineer will compute the gallons of fuel used in that month for each of the contract items categorized in Section B by applying the unit fuel usage factors shown in Section B.
- (3) The engineer will summarize the total gallons (Q) of fuel used in that month for the items categorized in Section B.
- (4) The engineer will determine the Fuel Cost Adjustment credit or payment from the following formula:

$$FA = \left( \frac{CFI}{BFI} - 1 \right) \times Q \times BFI$$

(plus is payment to contractor; minus is credit to the department)

Where	FA	=	Fuel Cost Adjustment (plus or minus)
	CFI	=	Current Fuel Index
	BFI	=	Base Fuel Index
	Q	=	Monthly total gallons of fuel

#### **E Payment**

A Fuel Cost Adjustment credit to the department will be deducted as a dollar amount each month from any sums due to the contractor. A Fuel Cost Adjustment payment to the contractor will be made as a dollar amount each month.

Upon completion of the work under the contract, any difference between the estimated quantities and the final quantities will be determined. An average CFI, calculated by averaging the CFI for all months that fuel cost adjustment was applied, will be applied to the quantity differences. The average CFI shall be applied in accordance with the procedure set forth in Section D.

## ADDITIONAL SPECIAL PROVISION 6

### ASP 6 - Modifications to the standard specifications

*Make the following revisions to the standard specifications:*

#### 455.3.2.1 General

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

- (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 <sup>[1]</sup>	15.0 <sup>[2]</sup>	16.0	17.0

<sup>[1]</sup> 14.5 for E-0.3 and E-3 mixes.

<sup>[2]</sup> 15.5 for E-0.3 and E-3 mixes.

#### 465.2 Materials

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

- (2) Under the other section 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.

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**Errata**

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*Make the following corrections to the standard specifications:*

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**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.

**ADDITIONAL SPECIAL PROVISION 7**

- A. Reporting 1<sup>st</sup> Tier and DBE Payments During Construction
1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
  2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
  3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
  4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
  5. 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://www.dot.wi.gov/business/civilrights/laborwages/index.htm>

(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://www.dot.wi.gov/business/civilrights/laborwages/docs/crc-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.

**DECEMBER 2013**

**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://roadwaystandards.dot.wi.gov/standards/cmm/cm-02-28.pdf#cm2-28.5>

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://roadwaystandards.dot.wi.gov/standards/forms/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  
SAUK 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, 2014

**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	33.85	6.95	40.80
Carpenter	30.48	15.95	46.43
Cement Finisher	32.65	17.32	49.97
Future Increase(s): Add \$1.87 on 6/1/14; 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	34.07	19.25	53.32
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	22.15	2.31	24.46
Ironworker	31.25	19.46	50.71
Line Constructor (Electrical)	38.25	17.31	55.56
Painter	21.87	11.37	33.24
Pavement Marking Operator	30.00	0.00	30.00
Piledriver	30.98	15.90	46.88
Roofer or Waterproofor	20.75	3.73	24.48
Teledata Technician or Installer	21.34	1.19	22.53
Tuckpointer, Caulker or Cleaner	35.25	13.15	48.40
Underwater Diver (Except on Great Lakes)	34.48	15.90	50.38
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	34.43	15.24	49.67
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	35.50	15.89	51.39
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.58	40.36
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.70	34.45

**TRUCK DRIVERS**

Single Axle or Two Axle	34.22	19.90	54.12
Three or More Axle	24.52	17.77	42.29
Future Increase(s): Add \$1.30/hr on 6/1/2014. 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, Dumptror, Off Road Material Hauler	29.27	20.40	49.67
Future Increase(s): Add \$1.75/hr on 6/1/14; Add \$1.25/hr on 6/1/15; Add \$1.30/hr on 6/1/16; Add \$1.25/hr on 6/ 1/ 17. 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: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http:// www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm</a> .			
Pavement Marking Vehicle	23.31	17.13	40.44
Shadow or Pilot Vehicle	34.22	19.90	54.12
Truck Mechanic	23.31	17.13	40.44

**LABORERS**

General Laborer	29.04	14.63	43.67
Future Increase(s): Add \$1.60/hr on 6/1/2014. Premium Pay: Add \$.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add \$.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add \$.20/hr for blaster and powderman; Add \$.25/hr for bottomman; Add \$.35/hr for line and grade specialist; Add \$.45/hr for pipelayer. DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	24.36	13.88	38.24
Landscaper	29.04	14.63	43.67
Future Increase(s): Add \$1.60/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	25.67	14.63	40.30
Future Increase(s): Add \$1.60/hr on 6/1/2014. 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)	18.31	12.67	30.98
Railroad Track Laborer	13.50	8.42	21.92

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
<b>HEAVY EQUIPMENT OPERATORS</b>			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add \$1.75/hr on 6/1/2014); 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: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http:// www.dot.wi.gov/business/civilrights/laborwages/pwc. htm</a> .	36.72	20.40	57.12
Backhoe (Track Type) Having a Mfrg.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.75/hr on 6/1/2014); 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: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http:// www.dot.wi.gov/business/civilrights/laborwages/pwc. htm</a> .	36.22	20.40	56.62
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfrg.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches	35.72	20.40	56.12

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
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& A- Frames.			
Future Increase(s): Add \$1.75/hr on 6/1/2014); 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: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
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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.	35.46	20.40	55.86
Future Increase(s): Add \$1.75/hr on 6/1/2014); 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: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
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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.	35.17	20.40	55.57
Future Increase(s): Add \$1.75/hr on 6/1/2014); 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: <a href="http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm">http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm</a> .			
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Fiber Optic Cable Equipment.	26.69	16.65	43.34
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SUPERSEDES DECISION WI20120010  
U. S. DEPARTMENT OF LABOR  
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI140010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: August 1, 2014

LABORERS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits		Basic Hourly Rates	Fringe Benefits
<u>Truck Drivers:</u>					
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 .....	\$29.04 .....	14.53	1 & 2 Axles .....	25.18 .....	18.31
Group 2: Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); .....	29.14 .....	14.53	Three or More Axles; Euclids, Dumptor & Articulated, Truck Mechanic.....	25.38 .....	18.31
Group 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man.....	29.19 .....	14.53			
Group 4: Line and Grade Specialist .....	29.39 .....	14.53			
Group 5: Blaster and Powderman .....	29.24 .....	14.53			
Group 6: Flagperson; Traffic Control .....	25.67 .....	14.53			

CLASSES OF LABORER AND MECHANICS

Bricklayer .....	32.28 .....	18.10
Carpenter .....	30.48 .....	15.80
Millwright .....	32.11 .....	15.80
Piledriverman .....	30.98 .....	15.80
Ironworker .....	31.50 .....	20.03
Cement Mason/Concrete Finisher .....	32.65 .....	17.44
Electrician .....		See Page 3
Line Construction		
Lineman.....	39.50 .....	32% + 5.00
Heavy Equipment Operator .....	37.53 .....	32% + 5.00
Equipment Operator.....	31.60 .....	32% + 5.00
Heavy Groundman Driver .....	26.78 .....	14.11
Light Groundman Driver .....	24.86 .....	13.45
Groundsman .....	21.73 .....	32% + 5.00
Painter, Brush .....	24.50 .....	16.27
Painter, Spray, Structural Steel,Bridges.....	25.50 .....	16.27
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 3, 2014; Modification #1, dated February 7, 2014; Modification #2, dated March 14, 2014; Modification #3, dated May 2, 2014; Modification #4, dated June 27, 2014; Modification #5, dated July 4, 2014; Modification #6, dated July 25, 2014; Modification #7, dated August 1, 2014.



SUPERSEDES DECISION WI20120010  
U. S. DEPARTMENT OF LABOR  
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI140010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: August 1, 2014

<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 .....	\$37.72	\$20.93	(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. ....	\$36.72	\$20.93
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. ....	\$37.22	\$20.93	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. ....	\$36.46	\$20.93
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. ....	\$36.17	\$20.93
			Group 6: Off - road material hauler with or without ejector.....	\$30.27	\$20.93
			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: WI140010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: August 1, 2014

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 .....	\$28.40	16.676		
Area 2:				
Electricians.....	29.13	17.92	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: .....	28.50	28.75% + 9.27	Area 6 -	KENOSHA COUNTY
Area 5 .....	28.96	24.85% + 9.70		
Area 6 .....	35.25	19.30	Area 8 -	DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES
Area 8				
Electricians.....	30.60	24.95% + 10.33	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 9:				
Electricians.....	32.94	18.71	Area 10 -	CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES
Area 10 .....	29.64	20.54	Area 11 -	DOUGLAS COUNTY
Area 11 .....	32.54	24.07	Area 12 -	RACINE (except Burlington township) COUNTY
Area 12 .....	32.87	19.23	Area 13 -	MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES
Area 13 .....	32.82	22.51	Area 14 -	Statewide.
Teledata System Installer			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.
Area 14				
Installer/Technician .....	21.89	11.83		
Sound & Communications				
Area 15				
Installer .....	16.47	14.84		
Technician .....	24.75	16.04		
Area 1 -	CALUMET (except township of New Holstein), GREEN LAKE (N. part, including Townships of Berlin, St. Marie and Seneca), MARQUETTE (N. part, including Townships of Crystal Lake, Neshkoro, Newton & Springfield), OUTAGAMIE, WAUPACA, WAUSHARA and WINNEBAGO COUNTIES.			
Area 2 -	ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Mayville, Colby, Unity, Sherman, Fremont, Lynn and Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST. CROIX, SAWYER, TAYLOR, 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:  
20141209001PROJECT(S):  
1674-00-80  
1674-00-85FEDERAL ID(S):  
WISC 2014432  
N/A

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	252.000				
		STA	.		.	
0020	201.0120 CLEARING	210.000				
		ID	.		.	
0030	201.0205 GRUBBING	252.000				
		STA	.		.	
0040	201.0220 GRUBBING	210.000				
		ID	.		.	
0050	203.0100 REMOVING SMALL PIPE CULVERTS	15.000				
		EACH	.		.	
0060	204.0100 REMOVING PAVEMENT	656.000				
		SY	.		.	
0070	204.0110 REMOVING ASPHALTIC SURFACE	225.000				
		SY	.		.	
0080	204.0150 REMOVING CURB & GUTTER	4,125.000				
		LF	.		.	
0090	204.0170 REMOVING FENCE	11,250.000				
		LF	.		.	
0100	204.0210 REMOVING MANHOLES	1.000				
		EACH	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20141209001PROJECT(S):  
1674-00-80  
1674-00-85FEDERAL ID(S):  
WISC 2014432  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0110	204.0220 REMOVING INLETS	15.000				
	EACH		.		.	
0120	204.0225 REMOVING SEPTIC TANKS	4.000				
	EACH		.		.	
0130	204.0235 REMOVING BUILDINGS (PARCEL) 001. PARCEL 18	LUMP	LUMP			.
0140	204.0235 REMOVING BUILDINGS (PARCEL) 002. PARCEL 22	LUMP	LUMP			.
0150	204.0235 REMOVING BUILDINGS (PARCEL) 003. PARCEL 44	LUMP	LUMP			.
0160	204.0235 REMOVING BUILDINGS (PARCEL) 004. PARCEL 47	LUMP	LUMP			.
0170	204.0235 REMOVING BUILDINGS (PARCEL) 005. PARCEL 53	LUMP	LUMP			.
0180	204.0235 REMOVING BUILDINGS (PARCEL) 006. PARCEL 14	LUMP	LUMP			.
0190	204.0235 REMOVING BUILDINGS (PARCEL) 007. PARCEL 23	LUMP	LUMP			.
0200	204.0240 SITE CLEARANCE (PARCEL) 001. PARCEL 18	LUMP	LUMP			.
0210	204.0240 SITE CLEARANCE (PARCEL) 002. PARCEL 22	LUMP	LUMP			.

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20141209001PROJECT(S):  
1674-00-80  
1674-00-85FEDERAL ID(S):  
WISC 2014432  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0220	204.0240 SITE CLEARANCE (PARCEL) 003. PARCEL 44	LUMP	LUMP		.	
0230	204.0240 SITE CLEARANCE (PARCEL) 004. PARCEL 47	LUMP	LUMP		.	
0240	204.0240 SITE CLEARANCE (PARCEL) 005. PARCEL 53	LUMP	LUMP		.	
0250	204.0240 SITE CLEARANCE (PARCEL) 006. PARCEL 14	LUMP	LUMP		.	
0260	204.0240 SITE CLEARANCE (PARCEL) 007. PARCEL 23	LUMP	LUMP		.	
0270	204.0245 REMOVING STORM SEWER (SIZE) 001. 12-INCH	1,775.000 LF	.		.	
0280	204.0265 ABANDONING WELLS	4.000 EACH	.		.	
0290	205.0100 EXCAVATION COMMON	1,782,276 CY	.		.	
0300	205.0200 EXCAVATION ROCK	377,828.000 CY	.		.	
0310	205.0400 EXCAVATION MARSH	72,735.000 CY	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20141209001PROJECT(S):  
1674-00-80  
1674-00-85FEDERAL ID(S):  
WISC 2014432  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0320	206.1000 EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 001. B-56-205	LUMP	LUMP		.	
0330	206.1000 EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 002. B-56-206	LUMP	LUMP		.	
0340	206.1000 EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 003. B-56-209	LUMP	LUMP		.	
0350	206.1000 EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 004. B-56-210	LUMP	LUMP		.	
0360	206.1000 EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 005. B-56-213	LUMP	LUMP		.	
0370	206.2000 EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 001. C-56-2032	LUMP	LUMP		.	
0380	206.2000 EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 002. C-56-2029	LUMP	LUMP		.	
0390	208.0100 BORROW	93,670.000 CY	.		.	
0400	209.0100 BACKFILL GRANULAR	109,103.000 CY	.		.	



## SCHEDULE OF ITEMS

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1674-00-80  
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WISC 2014432  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0410	210.0100 BACKFILL STRUCTURE	7,055.000 CY	.		.	
0420	213.0100 FINISHING ROADWAY (PROJECT) 001. 1674-00-80	1.000 EACH	.		.	
0430	305.0110 BASE AGGREGATE DENSE 3/4-INCH	5,432.000 TON	.		.	
0440	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	82,504.000 TON	.		.	
0450	311.0115 BREAKER RUN	510.000 CY	.		.	
0460	312.0110 SELECT CRUSHED MATERIAL	275,000.000 TON	.		.	
0470	405.0100 COLORING CONCRETE RED	670.000 CY	.		.	
0480	415.0070 CONCRETE PAVEMENT 7-INCH	1,575.000 SY	.		.	
0490	415.0090 CONCRETE PAVEMENT 9-INCH	13,350.000 SY	.		.	
0500	416.0170 CONCRETE DRIVEWAY 7-INCH	301.000 SY	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0510	416.0508 CONCRETE ROUNDAABOUT TRUCK APRON 8-INCH	300.000 SY	.		.	
0520	416.0512 CONCRETE ROUNDAABOUT TRUCK APRON 12-INCH	1,800.000 SY	.		.	
0530	455.0105 ASPHALTIC MATERIAL PG58-28	366.000 TON	.		.	
0540	455.0605 TACK COAT	692.000 GAL	.		.	
0550	460.1101 HMA PAVEMENT TYPE E-1	3,900.000 TON	.		.	
0560	460.1110 HMA PAVEMENT TYPE E-10	2,520.000 TON	.		.	
0570	460.2000 INCENTIVE DENSITY HMA PAVEMENT	4,120.000 DOL	1.00000		4120.00	
0580	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	180.000 TON	.		.	
0590	465.0310 ASPHALTIC CURB	90.000 LF	.		.	
0600	465.0315 ASPHALTIC FLUMES	200.000 SY	.		.	
0610	502.0100 CONCRETE MASONRY BRIDGES	3,211.000 CY	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0620	502.3200 PROTECTIVE SURFACE TREATMENT	5,804.000 SY	.		.	
0630	503.0137 PRESTRESSED GIRDER TYPE I 36W-INCH	1,628.000 LF	.		.	
0640	503.0146 PRESTRESSED GIRDER TYPE I 45W-INCH	3,157.000 LF	.		.	
0650	504.0100 CONCRETE MASONRY CULVERTS	822.000 CY	.		.	
0660	505.0405 BAR STEEL REINFORCEMENT HS BRIDGES	41,640.000 LB	.		.	
0670	505.0410 BAR STEEL REINFORCEMENT HS CULVERTS	98,855.000 LB	.		.	
0680	505.0605 BAR STEEL REINFORCEMENT HS COATED BRIDGES	503,495.000 LB	.		.	
0690	505.0610 BAR STEEL REINFORCEMENT HS COATED CULVERTS	8,365.000 LB	.		.	
0700	506.2605 BEARING PADS ELASTOMERIC NON-LAMINATED	104.000 EACH	.		.	
0710	506.4000 STEEL DIAPHRAGMS (STRUCTURE) 001. B-56-205	16.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0720	506.4000 STEEL DIAPHRAGMS (STRUCTURE) 002. B-56-206	16.000 EACH	.		.	
0730	506.4000 STEEL DIAPHRAGMS (STRUCTURE) 003. B-56-209	16.000 EACH	.		.	
0740	506.4000 STEEL DIAPHRAGMS (STRUCTURE) 004. B-56-210	16.000 EACH	.		.	
0750	506.4000 STEEL DIAPHRAGMS (STRUCTURE) 005. B-56-213	20.000 EACH	.		.	
0760	509.5100.S POLYMER OVERLAY	293.000 SY	.		.	
0770	516.0500 RUBBERIZED MEMBRANE WATERPROOFING	240.000 SY	.		.	
0780	517.1010.S CONCRETE STAINING (STRUCTURE) 001. B-56-205	5,088.000 SF	.		.	
0790	517.1010.S CONCRETE STAINING (STRUCTURE) 002. B-56-206	5,103.000 SF	.		.	
0800	517.1010.S CONCRETE STAINING (STRUCTURE) 003. B-56-209	4,565.000 SF	.		.	
0810	517.1010.S CONCRETE STAINING (STRUCTURE) 004. B-56-210	4,255.000 SF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0820	517.1010.S CONCRETE STAINING (STRUCTURE) 005. B-56-213	6,180.000 SF	.		.	
0830	517.1010.S CONCRETE STAINING (STRUCTURE) 006. R-56-33	1,945.000 SF	.		.	
0840	517.1010.S CONCRETE STAINING (STRUCTURE) 007. R-56-35	3,060.000 SF	.		.	
0850	517.1010.S CONCRETE STAINING (STRUCTURE) 008. R-56-36	1,005.000 SF	.		.	
0860	517.1015.S CONCRETE STAINING MULTI-COLOR (STRUCTURE) 001. B-56-205	1,412.000 SF	.		.	
0870	517.1015.S CONCRETE STAINING MULTI-COLOR (STRUCTURE) 002. B-56-206	1,412.000 SF	.		.	
0880	517.1015.S CONCRETE STAINING MULTI-COLOR (STRUCTURE) 003. B-56-209	920.000 SF	.		.	
0890	517.1015.S CONCRETE STAINING MULTI-COLOR (STRUCTURE) 004. B-56-210	1,325.000 SF	.		.	
0900	517.1015.S CONCRETE STAINING MULTI-COLOR (STRUCTURE) 005. B-56-213	1,000.000 SF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0910	517.1050.S ARCHITECTURAL SURFACE TREATMENT (STRUCTURE) 001. B-56-205	1,412.000 SF	.		.	
0920	517.1050.S ARCHITECTURAL SURFACE TREATMENT (STRUCTURE) 002. B-56-206	1,412.000 SF	.		.	
0930	517.1050.S ARCHITECTURAL SURFACE TREATMENT (STRUCTURE) 003. B-56-209	1,080.000 SF	.		.	
0940	517.1050.S ARCHITECTURAL SURFACE TREATMENT (STRUCTURE) 004. B-56-210	1,325.000 SF	.		.	
0950	517.1050.S ARCHITECTURAL SURFACE TREATMENT (STRUCTURE) 005. B-56-213	1,175.000 SF	.		.	
0960	520.4018 CULVERT PIPE TEMPORARY 18-INCH	412.000 LF	.		.	
0970	520.8000 CONCRETE COLLARS FOR PIPE	2.000 EACH	.		.	
0980	521.0118 CULVERT PIPE CORRUGATED STEEL 18-INCH	121.000 LF	.		.	
0990	521.0124 CULVERT PIPE CORRUGATED STEEL 24-INCH	56.000 LF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1000	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH	14.000 EACH	.		.	
1010	521.1018 APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH	8.000 EACH	.		.	
1020	521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH	4.000 EACH	.		.	
1030	522.0124 CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH	104.000 LF	.		.	
1040	522.0160 CULVERT PIPE REINFORCED CONCRETE CLASS III 60-INCH	240.000 LF	.		.	
1050	522.0324 CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH	1,575.000 LF	.		.	
1060	522.0336 CULVERT PIPE REINFORCED CONCRETE CLASS IV 36-INCH	217.000 LF	.		.	
1070	522.0348 CULVERT PIPE REINFORCED CONCRETE CLASS IV 48-INCH	134.000 LF	.		.	
1080	522.0360 CULVERT PIPE REINFORCED CONCRETE CLASS IV 60-INCH	361.000 LF	.		.	
1090	522.0548 CULVERT PIPE REINFORCED CONCRETE CLASS V 48-INCH	318.000 LF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1100	522.0572 CULVERT PIPE REINFORCED CONCRETE CLASS V 72-INCH	383.000 LF	.		.	
1110	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	2.000 EACH	.		.	
1120	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	52.000 EACH	.		.	
1130	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	4.000 EACH	.		.	
1140	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	6.000 EACH	.		.	
1150	522.1042 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 42-INCH	1.000 EACH	.		.	
1160	522.1048 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH	6.000 EACH	.		.	
1170	522.1060 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 60-INCH	8.000 EACH	.		.	
1180	522.1072 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 72-INCH	2.000 EACH	.		.	



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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1190	523.0419 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH	295.000 LF	.		.	
1200	523.0519 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH	10.000 EACH	.		.	
1210	523.0529 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 29X45-INCH	2.000 EACH	.		.	
1220	550.1100 PILING STEEL HP 10-INCH X 42 LB	7,890.000 LF	.		.	
1230	601.0120 CONCRETE CURB TYPE J	280.000 LF	.		.	
1240	601.0405 CONCRETE CURB & GUTTER 18-INCH TYPE A	1,100.000 LF	.		.	
1250	601.0409 CONCRETE CURB & GUTTER 30-INCH TYPE A	12,200.000 LF	.		.	
1260	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D	4,375.000 LF	.		.	
1270	601.0551 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A	500.000 LF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1280	601.0557 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	1,425.000 LF	.		.	
1290	601.0580 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	1,450.000 LF	.		.	
1300	602.0410 CONCRETE SIDEWALK 5-INCH	48,600.000 SF	.		.	
1310	602.0420 CONCRETE SIDEWALK 7-INCH	370.000 SF	.		.	
1320	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW	576.000 SF	.		.	
1330	606.0200 RIPRAP MEDIUM	2,800.000 CY	.		.	
1340	606.0300 RIPRAP HEAVY	635.000 CY	.		.	
1350	606.0700 GROUTED RIPRAP HEAVY	2,300.000 CY	.		.	
1360	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	1,572.000 LF	.		.	
1370	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	337.000 LF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1380	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	336.000 LF	.		.	
1390	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	1,724.000 LF	.		.	
1400	608.0327 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 27-INCH	13.000 LF	.		.	
1410	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH	527.000 LF	.		.	
1420	608.0336 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH	1,429.000 LF	.		.	
1430	608.0342 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 42-INCH	44.000 LF	.		.	
1440	608.0348 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 48-INCH	454.000 LF	.		.	
1450	610.0129 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 29X45-INCH	137.000 LF	.		.	
1460	611.0530 MANHOLE COVERS TYPE J	23.000 EACH	.		.	
1470	611.0610 INLET COVERS TYPE BW	8.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1480	611.0612 INLET COVERS TYPE C	2.000 EACH	.		.	
1490	611.0624 INLET COVERS TYPE H	47.000 EACH	.		.	
1500	611.0627 INLET COVERS TYPE HM	1.000 EACH	.		.	
1510	611.0639 INLET COVERS TYPE H-S	18.000 EACH	.		.	
1520	611.0642 INLET COVERS TYPE MS	5.000 EACH	.		.	
1530	611.0652 INLET COVERS TYPE T	12.000 EACH	.		.	
1540	611.0654 INLET COVERS TYPE V	14.000 EACH	.		.	
1550	611.2004 MANHOLES 4-FT DIAMETER	15.000 EACH	.		.	
1560	611.2005 MANHOLES 5-FT DIAMETER	22.000 EACH	.		.	
1570	611.2006 MANHOLES 6-FT DIAMETER	4.000 EACH	.		.	
1580	611.2007 MANHOLES 7-FT DIAMETER	1.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1590	611.3003 INLETS 3-FT DIAMETER	3.000 EACH	.		.	
1600	611.3004 INLETS 4-FT DIAMETER	1.000 EACH	.		.	
1610	611.3220 INLETS 2X2-FT	15.000 EACH	.		.	
1620	611.3225 INLETS 2X2.5-FT	14.000 EACH	.		.	
1630	611.3230 INLETS 2X3-FT	48.000 EACH	.		.	
1640	611.3902 INLETS MEDIAN 2 GRATE	1.000 EACH	.		.	
1650	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH	100.000 LF	.		.	
1660	612.0212 PIPE UNDERDRAIN UNPERFORATED 12-INCH	847.000 LF	.		.	
1670	612.0406 PIPE UNDERDRAIN WRAPPED 6-INCH	1,745.000 LF	.		.	
1680	612.0804 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 4-INCH	10.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1690	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH	3.000 EACH	.		.	
1700	614.0150 ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	20.000 EACH	.		.	
1710	614.0396 GUARDRAIL MOW STRIP ASPHALT	200.000 SY	.		.	
1720	614.2300 MGS GUARDRAIL 3	100.000 LF	.		.	
1730	614.2500 MGS THRIE BEAM TRANSITION	150.000 LF	.		.	
1740	614.2610 MGS GUARDRAIL TERMINAL EAT	4.000 EACH	.		.	
1750	616.0204 FENCE CHAIN LINK 4-FT	400.000 LF	.		.	
1760	616.0206 FENCE CHAIN LINK 6-FT	28,400.000 LF	.		.	
1770	616.0208 FENCE CHAIN LINK 8-FT	8,750.000 LF	.		.	
1780	616.0329 GATES CHAIN LINK (WIDTH) 001. 3-FOOT	6.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1790	616.0700.S FENCE SAFETY	500.000				
		LF	.		.	
1800	618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 001. 1674-00-80	1.000				
		EACH	.		.	
1810	619.1000 MOBILIZATION	1.000				
		EACH	.		.	
1820	620.0200 CONCRETE MEDIAN BLUNT NOSE	225.000				
		SF	.		.	
1830	620.0300 CONCRETE MEDIAN SLOPED NOSE	800.000				
		SF	.		.	
1840	621.0100 LANDMARK REFERENCE MONUMENTS	30.000				
		EACH	.		.	
1850	624.0100 WATER	12,000.000				
		MGAL	.		.	
1860	625.0500 SALVAGED TOPSOIL	561,800.000				
		SY	.		.	
1870	627.0200 MULCHING	39,800.000				
		SY	.		.	
1880	628.1504 SILT FENCE	22,000.000				
		LF	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
1890	628.1520 SILT FENCE MAINTENANCE	11,000.000 LF	.		.	
1900	628.1905 MOBILIZATIONS EROSION CONTROL	24.000 EACH	.		.	
1910	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL	15.000 EACH	.		.	
1920	628.2004 EROSION MAT CLASS I TYPE B	446,700.000 SY	.		.	
1930	628.2027 EROSION MAT CLASS II TYPE C	19,900.000 SY	.		.	
1940	628.7005 INLET PROTECTION TYPE A	109.000 EACH	.		.	
1950	628.7010 INLET PROTECTION TYPE B	2.000 EACH	.		.	
1960	628.7015 INLET PROTECTION TYPE C	62.000 EACH	.		.	
1970	628.7020 INLET PROTECTION TYPE D	4.000 EACH	.		.	
1980	628.7504 TEMPORARY DITCH CHECKS	3,125.000 LF	.		.	
1990	628.7555 CULVERT PIPE CHECKS	290.000 EACH	.		.	



## SCHEDULE OF ITEMS

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CONTRACT:  
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1674-00-80  
1674-00-85FEDERAL ID(S):  
WISC 2014432  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2000	628.7560 TRACKING PADS	7.000				
		EACH	.		.	
2010	628.7560.S STONE OR ROCK DITCH CHECKS	290.000				
		CY	.		.	
2020	629.0210 FERTILIZER TYPE B	400.000				
		CWT	.		.	
2030	630.0120 SEEDING MIXTURE NO. 20	300.000				
		LB	.		.	
2040	630.0130 SEEDING MIXTURE NO. 30	4,900.000				
		LB	.		.	
2050	630.0171 SEEDING MIXTURE NO. 70A	385.000				
		LB	.		.	
2060	630.0175 SEEDING MIXTURE NO. 75	1,330.000				
		LB	.		.	
2070	630.0200 SEEDING TEMPORARY	15,100.000				
		LB	.		.	
2080	630.0400 SEEDING NURSE CROP	2,550.000				
		LB	.		.	
2090	631.0300 SOD WATER	100.000				
		MGAL	.		.	
2100	631.1000 SOD LAWN	3,960.000				
		SY	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2110	632.0101 TREES (SPECIES, ROOT, SIZE) 001. BIRCH, RIVER 'HERITAGE', B&B, 2. 5-CAL.	43.000 EACH	.		.	
2120	632.0101 TREES (SPECIES, ROOT, SIZE) 002. HACKBERRY, "PRAIRIE PRIDE", B&B, 2.5-INCH CAL.	13.000 EACH	.		.	
2130	632.0101 TREES (SPECIES, ROOT, SIZE) 003. HONEYLOCUST, THORNLESS 'IMPERIAL', B&B, 2.5-INCH CAL.	2.000 EACH	.		.	
2140	632.0101 TREES (SPECIES, ROOT, SIZE) 004. MAPLE, FREEMAN 'SIENNA GLEN', B&B, 2.5-INCH CAL.	1.000 EACH	.		.	
2150	632.0101 TREES (SPECIES, ROOT, SIZE) 005. OAK, SWAMP WHITE, B&B, 2. 5-INCH CAL	23.000 EACH	.		.	
2160	632.0101 TREES (SPECIES, ROOT, SIZE) 006. HAWTHORN, COCKSPUR THORNLESS (SHRUB FORM TREE), B&B, 6-FOOT HT.	11.000 EACH	.		.	
2170	632.0101 TREES (SPECIES, ROOT, SIZE) 007. HAWTHORN, 'WINTER KING' (SHRUB FROM TREE), B&B, 6-FOOT HT.	20.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
2180	632.0101 TREES (SPECIES, ROOT, SIZE) 008. SERVICEBERRY, SMOOTH (SHRUB FORM TREE), B&B, 5-FOOT HT.	27.000 EACH	.		.	
2190	632.0101 TREES (SPECIES, ROOT, SIZE) 009. VIBURNUM, BLACKHAW 'FOREST ROUGE' (SHRUB FORM TREE), B&B 6-FOOT HT.	40.000 EACH	.		.	
2200	632.0101 TREES (SPECIES, ROOT, SIZE) 009. VIBURNUM, BLACKHAW 'FOREST ROUGE' (SHRUB FORM TREE), B&B, 6-FOOT HT.	18.000 EACH	.		.	
2210	632.0101 TREES (SPECIES, ROOT, SIZE) 010. JUNIPER, 'MOUNTBATTEN', B&B, 5-FOOT HT.	16.000 EACH	.		.	
2220	632.0101 TREES (SPECIES, ROOT, SIZE) 011. SPRUCE, BLACK HILLS, B&B, 7-FOOT HT.	22.000 EACH	.		.	
2230	632.0201 SHRUBS (SPECIES, ROOT, SIZE) 001. BUTTONBUSH, CONT., 3' HT. /# 5	70.000 EACH	.		.	
2240	632.0201 SHRUBS (SPECIES, ROOT, SIZE) 002. ELDERBERRY, CONT. 3' HT. /# 5	135.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2250	632.0201 SHRUBS (SPECIES, ROOT, SIZE) 003. WILLOW, PUSSY, CONT., 3' HT./ # 5	85.000 EACH	.		.	
2260	632.9101 LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES	20.000 EACH	.		.	
2270	633.5200 MARKERS CULVERT END	81.000 EACH	.		.	
2280	634.0612 POSTS WOOD 4X6-INCH X 12-FT	29.000 EACH	.		.	
2290	634.0614 POSTS WOOD 4X6-INCH X 14-FT	41.000 EACH	.		.	
2300	634.0616 POSTS WOOD 4X6-INCH X 16-FT	27.000 EACH	.		.	
2310	634.0618 POSTS WOOD 4X6-INCH X 18-FT	16.000 EACH	.		.	
2320	634.0811 POSTS TUBULAR STEEL 2X2-INCH X 11-FT	4.000 EACH	.		.	
2330	634.0885 POSTS TUBULAR STEEL 2X2-INCH X 8.5-FT	4.000 EACH	.		.	
2340	637.1220 SIGNS TYPE I REFLECTIVE SH	724.000 SF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2350	637.2210 SIGNS TYPE II REFLECTIVE H	555.430 SF	.		.	
2360	637.2220 SIGNS TYPE II REFLECTIVE SH	20.250 SF	.		.	
2370	637.2230 SIGNS TYPE II REFLECTIVE F	137.250 SF	.		.	
2380	638.2102 MOVING SIGNS TYPE II	9.000 EACH	.		.	
2390	638.2602 REMOVING SIGNS TYPE II	29.000 EACH	.		.	
2400	638.3000 REMOVING SMALL SIGN SUPPORTS	35.000 EACH	.		.	
2410	638.4000 MOVING SMALL SIGN SUPPORTS	2.000 EACH	.		.	
2420	641.8100 OVERHEAD SIGN SUPPORT (STRUCTURE) 001. S-56-25	LUMP	LUMP		.	
2430	641.8100 OVERHEAD SIGN SUPPORT (STRUCTURE) 002. S-56-26	LUMP	LUMP		.	
2440	641.8100 OVERHEAD SIGN SUPPORT (STRUCTURE) 003. S-56-27	LUMP	LUMP		.	

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			DOLLARS	CTS	DOLLARS	CTS
2450	641.8100 OVERHEAD SIGN SUPPORT (STRUCTURE) 004. S-56-28	LUMP	LUMP		.	
2460	642.5401 FIELD OFFICE TYPE D	1.000 EACH	.		.	
2470	642.6001 FIELD LABORATORY	1.000 EACH	.		.	
2480	643.0100 TRAFFIC CONTROL (PROJECT) 001. 1674-00-80	1.000 EACH	.		.	
2490	643.0300 TRAFFIC CONTROL DRUMS	7,500.000 DAY	.		.	
2500	643.0420 TRAFFIC CONTROL BARRICADES TYPE III	6,060.000 DAY	.		.	
2510	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A	12,120.000 DAY	.		.	
2520	643.0710 TRAFFIC CONTROL WARNING LIGHTS TYPE B	100.000 DAY	.		.	
2530	643.0900 TRAFFIC CONTROL SIGNS	6,400.000 DAY	.		.	
2540	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I	8.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2550	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II	12.000 EACH	.		.	
2560	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE	150.000 SF	.		.	
2570	643.1050 TRAFFIC CONTROL SIGNS PCMS	158.000 DAY	.		.	
2580	643.2000 TRAFFIC CONTROL DETOUR (PROJECT) 001. 1674-00-80	1.000 EACH	.		.	
2590	643.3000 TRAFFIC CONTROL DETOUR SIGNS	19,460.000 DAY	.		.	
2600	645.0105 GEOTEXTILE FABRIC TYPE C	1,310.000 SY	.		.	
2610	645.0111 GEOTEXTILE FABRIC TYPE DF SCHEDULE A	120.000 SY	.		.	
2620	645.0120 GEOTEXTILE FABRIC TYPE HR	1,315.000 SY	.		.	
2630	645.0130 GEOTEXTILE FABRIC TYPE R	5,600.000 SY	.		.	
2640	645.0140 GEOTEXTILE FABRIC TYPE SAS	1,100.000 SY	.		.	
2650	646.0106 PAVEMENT MARKING EPOXY 4-INCH	10,700.000 LF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2660	646.0126 PAVEMENT MARKING EPOXY 8-INCH	340.000 LF	.		.	
2670	647.0156 PAVEMENT MARKING ARROWS EPOXY TYPE 1	4.000 EACH	.		.	
2680	647.0166 PAVEMENT MARKING ARROWS EPOXY TYPE 2	8.000 EACH	.		.	
2690	647.0176 PAVEMENT MARKING ARROWS EPOXY TYPE 3	2.000 EACH	.		.	
2700	647.0356 PAVEMENT MARKING WORDS EPOXY	5.000 EACH	.		.	
2710	647.0456 PAVEMENT MARKING CURB EPOXY	140.000 LF	.		.	
2720	647.0566 PAVEMENT MARKING STOP LINE EPOXY 18-INCH	40.000 LF	.		.	
2730	647.0606 PAVEMENT MARKING ISLAND NOSE EPOXY	4.000 EACH	.		.	
2740	647.0726 PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	200.000 LF	.		.	
2750	647.0766 PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	150.000 LF	.		.	
2760	650.4000 CONSTRUCTION STAKING STORM SEWER	162.000 EACH	.		.	



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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2770	650.4500 CONSTRUCTION STAKING SUBGRADE	63,000.000 LF	.		.	
2780	650.5000 CONSTRUCTION STAKING BASE	9,900.000 LF	.		.	
2790	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	21,156.000 LF	.		.	
2800	650.6000 CONSTRUCTION STAKING PIPE CULVERTS	42.000 EACH	.		.	
2810	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 001. B-56-205	LUMP	LUMP		.	
2820	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 002. B-56-206	LUMP	LUMP		.	
2830	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 003. B-56-209	LUMP	LUMP		.	
2840	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 004. B-56-210	LUMP	LUMP		.	
2850	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 005. B-56-213	LUMP	LUMP		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2860	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 006. C-56-2032	LUMP	LUMP			.
2870	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 007. C-56-3082	LUMP	LUMP			.
2880	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 008. R-56-33	LUMP	LUMP			.
2890	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 009. R-56-35	LUMP	LUMP			.
2900	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 010. R-56-36	LUMP	LUMP			.
2910	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 011. S-56-25	LUMP	LUMP			.
2920	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 012. S-56-26	LUMP	LUMP			.
2930	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 013. S-56-27	LUMP	LUMP			.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2940	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 014. S-56-28	LUMP	LUMP			.
2950	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 015. C-56-2029	LUMP	LUMP			.
2960	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT	5,675.000 LF	.			.
2970	650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 001. 1674-00-80	LUMP	LUMP			.
2980	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 001. 1674-00-80	LUMP	LUMP			.
2990	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 002. 1674-00-85	LUMP	LUMP			.
3000	650.9920 CONSTRUCTION STAKING SLOPE STAKES	69,050.000 LF	.			.
3010	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	9,010.000 LF	.			.
3020	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	580.000 LF	.			.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
3030	653.0140 PULL BOXES STEEL 24X42-INCH	73.000 EACH	.		.	
3040	654.0105 CONCRETE BASES TYPE 5	46.000 EACH	.		.	
3050	654.0230 CONCRETE CONTROL CABINET BASES TYPE L30	2.000 EACH	.		.	
3060	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	8,900.000 LF	.		.	
3070	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG	55,000.000 LF	.		.	
3080	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 001. 359+62B, 32.8' LT	LUMP	LUMP		.	
3090	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 002. 416+88C, 37.1' RT	LUMP	LUMP		.	
3100	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	46.000 EACH	.		.	
3110	657.0322 POLES TYPE 5-ALUMINUM	46.000 EACH	.		.	
3120	657.0710 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT	61.000 EACH	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
3130	659.0600 UNDERDECK LIGHTING (LOCATION) 001. B-56-205	LUMP	LUMP			.
3140	659.0600 UNDERDECK LIGHTING (LOCATION) 002. B-56-206	LUMP	LUMP			.
3150	659.0600 UNDERDECK LIGHTING (LOCATION) 003. B-56-209	LUMP	LUMP			.
3160	659.0600 UNDERDECK LIGHTING (LOCATION) 004. B-56-210	LUMP	LUMP			.
3170	659.0802 PLAQUES SEQUENCE IDENTIFICATION	61.000 EACH	.		.	.
3180	659.1120 LUMINAIRES UTILITY LED B	61.000 EACH	.		.	.
3190	659.1210 LUMINAIRES UNDERDECK LED B	8.000 EACH	.		.	.
3200	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH	2.000 EACH	.		.	.
3210	690.0150 SAWING ASPHALT	695.000 LF	.		.	.
3220	690.0250 SAWING CONCRETE	80.000 LF	.		.	.
3230	715.0415 INCENTIVE STRENGTH CONCRETE PAVEMENT	4,478.000 DOL	1.00000		4478.00	

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			DOLLARS	CTS	DOLLARS	CTS
3240	715.0502 INCENTIVE STRENGTH CONCRETE STRUCTURES	24,198.000 DOL	1.00000		24198.00	
3250	ASP.1T0A ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	2,100.000 HRS	5.00000		10500.00	
3260	ASP.1T0G ON-THE-JOB TRAINING GRADUATE AT \$5. 00/HR	6,480.000 HRS	5.00000		32400.00	
3270	SPV.0035 SPECIAL 400. PLANTING MIXTURE	1,999.000 CY	.		.	
3280	SPV.0035 SPECIAL 401. TOPSOIL SPECIAL	433.000 CY	.		.	
3290	SPV.0060 SPECIAL 001. REMOVING BILLBOARDS	3.000 EACH	.		.	
3300	SPV.0060 SPECIAL 002. SETTLEMENT GAUGES	6.000 EACH	.		.	
3310	SPV.0060 SPECIAL 003. VIBRATING WIRE PIEZOMETER INSTRUMENTATION SYSTEM DELIVERED	8.000 EACH	.		.	
3320	SPV.0060 SPECIAL 300. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC ARROWS TYPE 1	12.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
3330	SPV.0060 SPECIAL 301. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC ARROWS TYPE 3R	4.000 EACH	.		.	
3340	SPV.0060 SPECIAL 302. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC ARROWS TYPE 3	6.000 EACH	.		.	
3350	SPV.0060 SPECIAL 303. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC WORDS	16.000 EACH	.		.	
3360	SPV.0060 SPECIAL 400. ASTER,SMOOTH 'SKY BLUE', CG, 1 GAL	189.000 EACH	.		.	
3370	SPV.0060 SPECIAL 401. BEE BALM, 'MARSHALL'S DELIGHT', CG, 1 GAL	189.000 EACH	.		.	
3380	SPV.0060 SPECIAL 402. BLACK-EYED SUSAN, CG, 1 GAL.	379.000 EACH	.		.	
3390	SPV.0060 SPECIAL 403. BLUE GRAMA, POT, 4-INCH	455.000 EACH	.		.	
3400	SPV.0060 SPECIAL 404. CONEFLOWER, PURPLE,CG,1 GAL.	379.000 EACH	.		.	
3410	SPV.0060 SPECIAL 405. LITTLE BLUESTEM, 'THE BLUES', CG, 1 GAL.	1,521.000 EACH	.		.	

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			DOLLARS	CTS	DOLLARS	CTS
3420	SPV.0060 SPECIAL 406. SWITCH GRASS, 'NORTHWIND', CG, 1 GAL.	302.000 EACH	.		.	
3430	SPV.0060 SPECIAL 407. SWITCH GRASS, 'RUBY RIBBONS', CG, 1 GAL.	379.000 EACH	.		.	
3440	SPV.0060 SPECIAL 408. FABRICATED ROCK ENCLOSURE, TYPE A	10.000 EACH	.		.	
3450	SPV.0060 SPECIAL 409. FABRICATED ROCK ENCLOSURE, TYPE B	7.000 EACH	.		.	
3460	SPV.0060 SPECIAL 410. FABRICATED ROCK ENCLOSURE, TYPE C	7.000 EACH	.		.	
3470	SPV.0060 SPECIAL 416. PRECAST CONCRETE PANELS	10.000 EACH	.		.	
3480	SPV.0060 SPECIAL 450. FIRE HYDRANT	6.000 EACH	.		.	
3490	SPV.0060 SPECIAL 451. WATER VALVE AND BOX 6-INCH	6.000 EACH	.		.	
3500	SPV.0060 SPECIAL 452. WATER VALVE AND BOX 8-INCH	5.000 EACH	.		.	
3510	SPV.0060 SPECIAL 453. WATER VALVE AND BOX 12-INCH	10.000 EACH	.		.	
3520	SPV.0060 SPECIAL 454. TEE 12-INCH X 6-INCH	4.000 EACH	.		.	



## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20141209001PROJECT(S):  
1674-00-80  
1674-00-85FEDERAL ID(S):  
WISC 2014432  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
3530	SPV.0060 SPECIAL 455. TEE 12-INCH X 8-INCH	3.000 EACH	.		.	
3540	SPV.0060 SPECIAL 456. TEE 12-INCH X 12-INCH	1.000 EACH	.		.	
3550	SPV.0060 SPECIAL 457. TEE 8-INCH X 6-INCH	2.000 EACH	.		.	
3560	SPV.0060 SPECIAL 458. BEND 8-INCH	1.000 EACH	.		.	
3570	SPV.0060 SPECIAL 459. BEND 12-INCH	13.000 EACH	.		.	
3580	SPV.0060 SPECIAL 460. PLUG 8-INCH	1.000 EACH	.		.	
3590	SPV.0060 SPECIAL 461. PLUG 12-INCH	1.000 EACH	.		.	
3600	SPV.0060 SPECIAL 462. REDUCER 12-INCH X 6-INCH	1.000 EACH	.		.	
3610	SPV.0060 SPECIAL 463. 1-INCH CORPORATION CURB STOP AND BOX	4.000 EACH	.		.	
3620	SPV.0060 SPECIAL 464. CONNECT TO EXISTING WATER MAIN	4.000 EACH	.		.	
3630	SPV.0060 SPECIAL 465. REMOVING FIRE HYDRANT	4.000 EACH	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:

PROJECT(S):

FEDERAL ID(S):

20141209001

1674-00-80

WISC 2014432

1674-00-85

N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
3640	SPV.0060 SPECIAL 466. REMOVING VALVE AND BOX	7.000 EACH	.		.	
3650	SPV.0060 SPECIAL 467. REMOVING EXISTING CURB STOP AND BOX	2.000 EACH	.		.	
3660	SPV.0060 SPECIAL 468. ABANDON EXISTING WATER MAIN	10.000 EACH	.		.	
3670	SPV.0060 SPECIAL 469. SANITARY SEWER WYE 8X6 INCH	2.000 EACH	.		.	
3680	SPV.0060 SPECIAL 470. SANITARY SEWER PLUG SDR 35 8-INCH	3.000 EACH	.		.	
3690	SPV.0060 SPECIAL 471. TRACER WIRE TERMINATION BOX	2.000 EACH	.		.	
3700	SPV.0060 SPECIAL 472. REMOVING SANITARY MANHOLE	2.000 EACH	.		.	
3710	SPV.0060 SPECIAL 473. ADJUSTING SANITARY MANHOLE BARREL SECTION	1.000 EACH	.		.	
3720	SPV.0060 SPECIAL 474. CONNECT TO EXISTING SANITARY SEWER	3.000 EACH	.		.	
3730	SPV.0060 SPECIAL 475. SANITARY MANHOLE COVER	11.000 EACH	.		.	

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WISC 2014432  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
3740	SPV.0060 SPECIAL 476. SANITARY MANHOLE CHIMNEY SEAL	11.000 EACH	.		.	
3750	SPV.0060 SPECIAL 477. CONSTRUCTION STAKING SANITARY SEWER SYSTEM	15.000 EACH	.		.	
3760	SPV.0060 SPECIAL 478. CONSTRUCTION STAKING CASING PIPE	3.000 EACH	.		.	
3770	SPV.0060 SPECIAL 500. COVERING SIGN TYPE I	8.000 EACH	.		.	
3780	SPV.0085 SPECIAL 001. SEEDING MIXTURE NO. 75 MODIFIED	400.000 LB	.		.	
3790	SPV.0085 SPECIAL 550. BAR STEEL REINFORCEMENT HS STAINLESS BRIDGES	5,710.000 LB	.		.	
3800	SPV.0090 SPECIAL 004. COCONUT FIBER ROLL, DELIVERED	11,000.000 LF	.		.	
3810	SPV.0090 SPECIAL 005. COCONUT FIBER ROLL, INSTALLED	11,000.000 LF	.		.	
3820	SPV.0090 SPECIAL 300. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 4-INCH	250.000 LF	.		.	
3830	SPV.0090 SPECIAL 301. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 8-INCH	2,450.000 LF	.		.	

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N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
3840	SPV.0090 SPECIAL 302. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC CROSSWALK 6-INCH	650.000 LF	.		.	
3850	SPV.0090 SPECIAL 303. PAVEMENT MARKING GROOVED CONTRAST PREFORMED THERMOPLASTIC 18-INCH	270.000 LF	.		.	
3860	SPV.0090 SPECIAL 450. WATER MAIN DUCTILE IRON 12-INCH	2,212.000 LF	.		.	
3870	SPV.0090 SPECIAL 451. WATER MAIN DUCTILE IRON 8-INCH	325.000 LF	.		.	
3880	SPV.0090 SPECIAL 452. WATER MAIN DUCTILE IRON 6-INCH	82.000 LF	.		.	
3890	SPV.0090 SPECIAL 453. WATER MAIN COPPER SERVICE 1-INCH	74.000 LF	.		.	
3900	SPV.0090 SPECIAL 454. REMOVING EXISTING WATER MAIN	1,019.000 LF	.		.	
3910	SPV.0090 SPECIAL 455. REMOVING EXISTING COPPER WATER SERVICE	173.000 LF	.		.	
3920	SPV.0090 SPECIAL 456. REMOVING EXISTING ASBESTOS CEMENT WATER MAIN	530.000 LF	.		.	

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N/A

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
3930	SPV.0090 SPECIAL 457. SANITARY SEWER MAIN SDR 35 8-INCH	372.000 LF	.		.	
3940	SPV.0090 SPECIAL 458. SANITARY SEWER MAIN C900 8-INCH	1,805.000 LF	.		.	
3950	SPV.0090 SPECIAL 459. TRACER WIRE	2,673.000 LF	.		.	
3960	SPV.0090 SPECIAL 460. SANITARY SEWER LATERAL 6-INCH	100.000 LF	.		.	
3970	SPV.0090 SPECIAL 461. REMOVING SANITARY SEWER	160.000 LF	.		.	
3980	SPV.0090 SPECIAL 462. CASING PIPE REINFORCED CONCRETE CLASS V 30-INCH	725.000 LF	.		.	
3990	SPV.0090 SPECIAL 463. CONSTRUCTION STAKING WATER MAIN	2,619.000 LF	.		.	
4000	SPV.0090 SPECIAL 551. FENCE CHAIN LINK POLYMER COATED 8-FT	241.000 LF	.		.	
4010	SPV.0090 SPECIAL 650. FENCE CHAIN LINK POLYMER-COATED 4-FT	720.000 LF	.		.	
4020	SPV.0105 SPECIAL 001. GEOTECHNICAL INSTRUMENTATION	LUMP	LUMP		.	
4030	SPV.0105 SPECIAL 002. CAP WELL	LUMP	LUMP		.	

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N/A

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
4040	SPV.0105 SPECIAL 003. CONCRETE PAVEMENT JOINT LAYOUT	LUMP	LUMP		.	
4050	SPV.0165 SPECIAL 070. CONCRETE SIDEWALK 8-INCH	3,200.000 SF	.		.	
4060	SPV.0165 SPECIAL 413. ANTI-GRAFFITI COATING	31,260.000 SF	.		.	
4070	SPV.0165 SPECIAL 650. WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD R-56-33	1,800.000 SF	.		.	
4080	SPV.0165 SPECIAL 651. WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD R-56-35	2,760.000 SF	.		.	
4090	SPV.0165 SPECIAL 652. WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD R-56-36	870.000 SF	.		.	
4100	SPV.0180 SPECIAL 400. SHREDDED HARDWOD BARK MULCH	1,804.000 SY	.		.	
4110	SPV.0180 SPECIAL 414. COLORED AND STAMPED CONCRETE 5-INCH	5,200.000 SY	.		.	
4120	SPV.0180 SPECIAL 417. SLOPE PAVING CRUSHED AGGREGATE SPECIAL	1,980.000 SY	.		.	
4130	SPV.0195 SPECIAL 400. LIMESTONE SCREENINGS	300.000 TON	.		.	

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N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
4140	SPV.0200 SPECIAL 450. SANITARY MANHOLE	VF 184.920	.		.	
	SECTION 0001 TOTAL				.	
	TOTAL BID				.	





**PLEASE ATTACH SCHEDULE OF ITEMS HERE**