HIGHWAY WORK PROPOSAL

Wisconsin Department of Transportation

Proposal Number:

DT1502 10/2010 COUNTY	s.66.29(7) Wis. Stats. STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	<u>HIGHWAY</u>
Dane	1010-00-72	WISC 2012 600	Madison - Lake Delton Lien Road - USH 51	IH 39

ADDENDUM REQUIRED ATTACHED AT BACK

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

Proposal Guaranty Required, \$ 100,000.00	Attach Proposal Guaranty on back of this PAGE.
Payable to: Wisconsin Department of Transportation	
Bid Submittal Due	Firm Name, Address, City, State, Zip Code
Date: November 13, 2012 Time (Local Time): 9:00 AM	SAMPLE
Contract Completion Time	
Ninety (90) Working Days	NOT FOR BIDDING PURPOSES
Assigned Disadvantaged Business Enterprise Goal 7 %	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 _____

Type of Work

(Signature, Notary Public, State of Wisconsin)

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

(Bidder Signature) (Print or Type Bidder Name)

(Date Commission Expires)

Notary Seal

(Bidder Title)

For Department Use Only

Grading, common excavation, base aggregate dense, warranted HMA pavement overlay, continuously reinforced concrete pavement repair and replacement, select crushed material, select borrow, curb and gutter, steel plate beam guard, permanent dynamic message sign, ramp gates, permanent signing, and pavement marking.

Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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 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

- 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

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 co	ondition 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)	(Name of Surety) (Affix Seal)	
(Company Name)	(Signature of Attorney-in-Fact)	
(Signature and Title)		
NOTARY FOR PRINCIPAL	NOTARY FOR SURETY	
(Date)	(Date)	
State of Wisconsin)	State of Wisconsin)	
) ss. County)) ss. County)	
On the above date, this instrument was acknowledged before me by the named person(s).	On the above date, this instrument was acknowledged before me by the named person(s).	
(Signature, Notary Public, State of Wisconsin)	(Signature, Notary Public, State of Wisconsin)	
(Print or Type Name, Notary Public, State of Wisconsin)	(Print or Type Name, Notary Public, State of Wisconsin)	
(Date Commission Expires)	(Date Commission Expires)	
Notary Seal	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

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

LIST OF SUBCONTRACTORS

Section 66.29(7), Wisconsin Statutes, provides that a bidder, as a part of his proposal, shall submit a list of the subcontractors he proposes to contract with and the class of work to be performed by each, provided that to qualify for such listing each subcontractor must first submit his bid in writing to the general contractor at least 48 hours prior to the time of bid closing. It further provides that a proposal of a bidder shall not be invalid if any subcontractor, and the class of work to be performed by such subcontractor, has been omitted from a proposal.

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

Name of Subcontractor	Class of Work	Estimated Value

DECEMBER 2000

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

Instructions for Certification

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

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

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

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

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

Special Provisions

Table of Contents

Article

Description

1.	General	3
2.	Scope of Work.	3
3.	Prosecution and Progress.	3
4.	Traffic.	5
5.	Holiday Work Restrictions.	. 10
6.	Utilities	. 11
7.	Other Contracts.	. 11
8.	Railroad Insurance and Coordination.	. 12
9.	Erosion Control.	. 13
10.	Intelligent Transportation Systems (ITS) Control of Materials	. 13
11.	Intelligent Transportation Systems – General Requirements.	
12.	Intelligent Transportation Systems – Conduit.	
13.	Select Borrow	
14.	QMP Base Aggregate.	. 20
15.	Base Aggregate Dense ³ / ₄ -Inch.	. 28
16.	Base Aggregate Dense 1 ¹ / ₄ -Inch.	. 28
17.	Select Crushed Material	
18.	Dust Control	. 29
19.	Removing Delineators, Item 204.9060.S.01.	. 29
20.	QMP Ride; Incentive IRI Ride, Item 440.4410.S.	
21.	Warranted HMA Pavement Overlay Mainline, Item 495.0100.S; Warranted HMA	
	Pavement Overlay Ancillary, Item 495.0200.S.	. 37
22.	Seeding Mixture No. 30.	
23.	Traffic Control Type II Sign Covering.	. 46
24.	Pavement Marking Wet Reflective Tape 8-Inch, Item 646.0873.S.	
25.	Pavement Marking Grooved Wet Reflective Tape 4-Inch, Item 646.0881.S.	. 48
26.	Install Pole Mounted Cabinet, Item 673.0225.S.	
27.	Portable Changeable Message Sign, Item SPV.0045.01.	. 52
28.	Ramp Closure Gates Hardwired 32-FT, Item SPV.0060.01; Ramp Closure Gates	
	Arms Stockpile 32-FT, Item SPV.0060.02; Ramp Closure Gates Hardwired 26-	
	FT, Item SPV.0060.03; Ramp Closure Gates Hardwired 24-FT, Item	
	SPV.0060.04.	. 59
29.	Marker Post Flexible for Guardrail Terminal, Item SPV.0060.05.	. 63
30.	Install Spread Spectrum Radio, Item SPV.0060.06.	. 64
31.	Install Cabinet Mount Yagi Antenna, Item SPV.0060.07.	. 66
32.	Install Pole Mount Yagi Antenna, Item SPV.0060.08	. 67
33.	Install Ground Mount Dynamic Message Sign, Item SPV.0060.09.	. 68
34.	Install Terminal Server, Item SPV.0060.10.	. 69
35.	Ground Rod, Item SPV.0060.11.	. 70
36.	Grounding Pull Box, Item SPV.0060.12.	. 71

37.	Removing HMA Pavement Tapered and Notched Longitudinal Joints Milling,	
	Item SPV.0090.01	71
38.	Concrete Curb and Gutter 4-Inch Sloped 36-Inch Type A Special, Item	
	SPV.0090.02	72
39.	Sawing Concrete Partial Sawcut, Item SPV.0090.03.	72
40.	Milling and Asphalt Fill Crack Treatment, Item SPV.0180.01.	72
41.	Continuously Reinforced Concrete Pavement SHES Repair, Item SPV.0180.02	. 73

SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 1010-00-72, Madison – Lake Delton, Lien Road – USH 51, IH 39, Dane 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, 2012 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 (20110930)

2. Scope of Work.

The work under this contract shall consist of grading, common excavation, base aggregate dense, warranted HMA pavement overlay, continuously reinforced concrete pavement repair and replacement, select crushed material, select borrow, curb and gutter, steel plate beam guard, permanent dynamic message sign, ramp gates, permanent signing, pavement marking, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract. 104-005 (20090901)

3. Prosecution and Progress.

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

Provide the time frame for construction of the project within the 2013 construction season to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure that the time frame is consistent with the contract completion time. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the beginning of the approved time frame.

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

Provide the Erosion Control Implementation Plan (ECIP) 14 days prior to the Preconstruction Conference.

The contract time for completion is based on an expedited work schedule and may require extraordinary forces and equipment. Included in this "Prosecution and Progress" article and "Traffic" article are restrictions to working hours and lane closures. Work efforts will possibly require multiple or concurrent controlling operations to occur at the same time. This information is included to assist the contractor and its subcontractors and shall not be interpreted as a demonstration of specified means and methods.

Work Restrictions

Do not begin or continue any work that closes traffic lanes, shoulders, or ramps outside the allowed time periods specified in the Traffic article in these special provisions. If the contractor fails to open all lanes of traffic and ramps by the specified times, then the department will assess the contractor interim liquidated damages of \$5,000 per hour per traffic lane or ramp for each hour of lane or ramp closure violations. These damages shall be a quarterly fraction of the \$5,000 hourly interim liquidated damages for each 15minute increment during which the lane or ramp closure violation occurs. The total interim liquidated damages shall be the summation of the separate interim liquidated damages for each lane or ramp closure violation. Hourly interim liquidated damages will be assessed using the Administrative bid item 801.0104 Failing to Open Road to Traffic.

The engineer reserves the right to order the opening of a closed lane or ramp at any time if the traffic congestion is determined by the department to be unacceptable.

In areas of beam guard rail replacement and adjustment, including thrie beam and terminal end treatments, ensure that new beam guard is installed and rails replaced within 24 hours after they have been removed, except for beam guard located from Station 426+90 EB to Station 446+32 EB, right. Beam guard located from Station 426+90 EB to Station 446+32 EB, right must be replaced within one week after it has been removed. All beam guard must be reinstalled by 5:00 AM each Friday. A shoulder or lane closure is required at all times during beam guard removal and installation until the work is complete, as shown in the plans. Do not install new beam guard posts adjacent to new concrete for curb and gutter until concrete has cured, as directed by the engineer.

If the contractor fails to open shoulders by the specified times, then the contractor will be assessed interim liquidated damages of \$5,000 per weekday per shoulder and \$10,000 per weekend day or portion thereof, per shoulder, using the Administrative bid item 801.0104 Failing to Open Road to Traffic.

Do not perform work on, nor close lanes, nor haul materials of any kind along or across any portion of the highway carrying IH 39 traffic starting at half time of a home game for the Wisconsin Badgers football team, and concluding four hours after the completion of the game. The engineer has authority to also apply work restrictions for other special events not listed here.

Perform the work in the order shown on the Construction Staging plans and as hereinafter detailed. Changes to the construction staging will not be permitted unless approved by the engineer.

Stage 1a: Base patch concrete pavement center lane north of USH 151.

Stage 1b: Base patch right lane and replace curb and gutter.

Construct grading for USH 51 exit ramp extensions in Stage 1a or 1b.

Stage 2a: Place lower layer of HMA pavement on median shoulder.

Stage 2b: Place lower layer of HMA pavement on median lane.

Stage 2c: Place lower layer of HMA pavement on center lane north of USH 151 or left center lane south of USH 151.

Stage 2d: Place lower layer of HMA pavement on right center lane south of USH 151.

Stage 2e: Place lower layer of HMA pavement on right lane and ramps.

Stage 2f: Place lower layer of HMA pavement on right shoulder.

Stage 3a: Place upper layer of HMA pavement on median shoulder.

Stage 3b: Place upper layer of HMA pavement on median lane.

Stage 3c: Place upper layer of HMA pavement on center lane north of USH 151 or left center lane south of USH 151.

Stage 3d: Place upper layer of HMA pavement on right center lane south of USH 151.

Stage 3e: Place upper layer of HMA pavement on right lane and ramps.

Stage 3f: Place upper layer of HMA pavement on right shoulder.

Stage 4a: Place base aggregate dense on right shoulder.

- Stage 4b: Place permanent pavement marking.
- Stage 4c: Construct rumble strips

Alternate Stages 2a, 2b, 2c, 2d, 2e, and 2f to minimize uneven pavement lanes. Alternate Stages 3a, 3b, 3c, 3d, 3e, and 3f to minimize uneven pavement lanes.

Uneven pavement lanes will not be allowed over the weekend. Construct HMA pavement layers to eliminate all uneven lanes before 5:00 AM each Friday.

Do not store equipment or materials within the wetland areas shown on the plans.

4. Traffic.

A General

Keep IH 39, on which this project is located, open to through traffic at all times throughout the project. Maintain all existing 12-foot wide lanes of traffic in each direction at all times, except as allowed below during limited night-time single and double lane closures. Keep all ramps and other roadways intersecting IH 39 open to traffic at all times except as allowed below.

All lane and ramp closures are subject to the approval of the region traffic engineer. Times listed for lane and ramp closure restrictions include setup and breakdown of any equipment and traffic control devices. Notify all local emergency services at least 24 hours prior to closing and re-opening lanes or ramps on IH 39. Provide the State Highway Patrol, the Dane County Sheriff's Department, and the engineer a current telephone number with which the contractor or his representative can be contacted during non-working hours in the event a safety hazard develops.

The length of lane closure will be limited to the work to be done that night, not to exceed five miles.

Wisconsin Lane Closure System Advanced Notification

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

Lane closures (without width, height or weight restriction)	3 business days
Extended closure hours	3 business days
System Ramp closures	7 calendar days
Lane closures (with width, height or weight restriction)	14 calendar days
Project Start	14 calendar days
Construction stage changes	14 calendar days

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

All lane, ramp, and shoulder closures shall be removed when work is not in progress. Failure to reopen closed lanes, ramps, and shoulders shall be subject to penalties specified under the article "Prosecution and Progress".

Do not park or store equipment, vehicles, or construction materials within the clear zone of any roadway carrying traffic during non-working hours except at locations and periods of time approved by the engineer. At such locations, the material and equipment involved shall not constitute a hazard to the traveling public.

During working hours, keep construction vehicles within the work zone to an absolute minimum.

Supplement standard spec 107.8 as follows:

Equip all contractors' vehicles and equipment operating in or near live traffic lanes with at least one hazard identification beacon (flashing amber light). The flashing amber light shall be activated when vehicles or equipment are operated on the roadway, parked in close proximity to the roadway, and when entering or exiting live lanes of traffic. The flashing amber light shall be mounted approximately midway between the transverse extremities of the vehicles or machinery and at the highest practicable point that provides visibility from

all directions. The light shall be of the flashing strobe or revolving type meeting the following minimum requirements:

Flashing Strobe Type Light	Revolving Type Light
360-degree lens	360-degree lens
60 to 90 flashes per minute	45 to 90 flashes
5-inch minimum height	4-5/8 inch minimum height
3-3/4 inch minimum diameter	3-3/4 inch minimum diameter

The light shall be equipped with bulbs of 50 candlepower minimum. Mounting shall be either magnetic or permanent. No compensation for furnishing and installing the flashing amber light to contractor owned construction equipment or vehicles will be provided for in the contract.

No contractor equipment, including trucks, shall be allowed to use maintenance/emergency crossovers for changing their direction of travel.

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

B Traffic Control Devices

Coordinate placement of traffic control devices with Projects 6020-02-71 and 6085-00-76. Do not close the westbound IH 39 entrance ramp from northbound USH 151 during closure of STH 19 with project 6085-00-76. See Other Contracts article for details.

Prior to any work being performed, place appropriate traffic control signing, devices and temporary and permanent pavement marking as detailed on the plans, in the Standard Detail Drawings and in conformance with the Manual of Uniform Traffic Control Devices (MUTCD). Do not proceed with any operation until all traffic control devices for such work are in the proper location, as approved by the engineer.

Place Traffic Control Signs Portable Changeable Message at the beginning of the project for each direction of IH 39 at least 14 calendar days prior to the beginning of construction. Obtain approval from the department for all messages for the Traffic Control Signs Portable Changeable Message. The engineer shall contact Jeff Gustafson at the Southwest Region Madison Office, (608) 516-6400.

Do not proceed with any operation until all traffic control devices for such work are in the proper location.

Place drums for lane or shoulder closures 1-foot minimum from edge of live traffic lane except as shown on the plans. Drums placed adjacent to the work areas shall be pulled back from the traveled lane when work is not in progress.

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

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

C Closures

Place Traffic Control Signs Portable Changeable Message for all lane and ramp closures as shown on the plans at least seven days prior to the lane or ramp closure. Obtain approval from the department for all messages for the Traffic Control Signs Portable Changeable Message. The engineer shall contact Jeff Gustafson at the Southwest Region Madison Office, (608) 516-6400. All lane closures are subject to the approval of the Region traffic engineer.

During the times when lane closures are allowed, maintain a minimum clear width of 18 feet, including the adjacent shoulder at all times.

Provide arrow boards for use during all lane closures in accordance to the MUTCD. Arrow boards for lane closures will be paid for under the item Traffic Control Arrow Boards for each night with a lane closure where an arrow board is in use.

Failure to reopen closed lanes shall be subject to penalties specified under the article "Prosecution and Progress".

All lane and shoulder closures shall be removed when work is not in progress.

D Detours

Detour traffic for ramp closures as shown on the plans. Install required traffic control and detour signs as shown on the plans at least 14 days prior to ramp closures and remove after completion of the project. Cover advance warning signs and detour signs until work begins.

Provide the name and phone number of a 24-hour contact person if problems occur with the detour signing and barricades and the name and phone number of a contact person to address questions.

E Lane Closures

Before Memorial Day of the year in which this project is constructed, limited night-time single lane closures will be allowed nightly 8:00 PM to 5:00 AM Monday PM through Friday AM, and Sunday 8:00 PM to 5:00 AM Monday, and only when required by the work operation in progress.

Between Memorial Day and Labor Day of the year in which this project is constructed, limited night-time single lane closures will be allowed nightly 8:00 PM to 5:00 AM Monday PM through Friday AM, and Sunday 10:00 PM to 5:00 AM Monday, and only when required by the work operation in progress.

After Labor Day of the year in which this project is constructed, limited night-time single lane closures will be allowed nightly 8:00 PM to 5:00 AM Monday PM through Friday AM, Sunday 10:00 PM to 5:00 AM Monday in the southbound direction, and Sunday 8:00 PM to 5:00 AM Monday in the northbound direction, and only when required by the work operation in progress.

After Columbus Day of the year in which this project is constructed (October 14, 2013), limited night-time single lane closures will be allowed nightly 8:00 PM to 5:00 AM Monday PM through Friday AM, and Sunday 8:00 PM to 5:00 AM Monday, and only when required by the work operation in progress.

Limited night-time double lane closures will be allowed nightly 10:00 PM to 5:00 AM Sunday PM through Friday AM. Night-time double lane closures for continuously reinforced concrete pavement repair and replacement of center lane(s) will be allowed nightly 8:00 PM to 5:00 AM Sunday PM through Friday AM.

Perform traffic control for lane closures as shown on the Construction Staging plans.

F Ramp Closures

Do not close more than one ramp at any time without the approval of the engineer. All hours of ramp closures shall fall within the hours allowed for single lane closures as specified above in paragraph E Lane Closures.

Close the westbound IH 39 entrance ramp from eastbound STH 30 immediately prior to and during single and double lane closures of the westbound median lane(s) at the south end of the project whenever these lane closures extend south of the exit ramp to High Crossing Boulevard and USH 151.

Close the eastbound IH 39 entrance ramp from High Crossing Boulevard whenever the eastbound IH 39 entrance ramp from northbound or southbound USH 151 is closed.

Each IH 39 exit ramp at the USH 51 interchange may be closed for two nights when grading and placing borrow, select crushed material, and base aggregate dense for the ramp extension work. During these same two nights of closures, construct continuously reinforced concrete pavement repair and replacement on the adjacent travel lane which would require closing the ramp.

The eastbound IH 39 entrance ramp from northbound USH 51 may be closed for three nights when constructing continuously reinforced concrete pavement repair and replacement on the adjacent travel lane which would require closing the ramp.

The eastbound IH 39 entrance ramp from High Crossing Boulevard may be closed for six nights when constructing continuously reinforced concrete pavement repair and replacement on the adjacent travel lane which would require closing the ramp.

Keep the eastbound IH 39 entrance ramps from northbound USH 151 and southbound USH 151 open at all times. Keep the westbound IH 39 exit ramps to High Crossing Boulevard, northbound USH 151, and southbound USH 151 open at all times. All other ramps may be closed for up to four hours when placing the leveling layer of HMA pavement, again for up to four hours when placing the surface layer of HMA pavement and constructing the butt joint, and again for up to four hours when placing base aggregate dense on the shoulders.

The following ramps may be closed for up to one hour when placing pavement marking and again for up to one hour when constructing rumble strips:

- Eastbound IH 39 exit ramps to USH 51 and USH 151
- Eastbound IH 39 entrance ramp from High Crossing Boulevard
- Westbound IH 39 exit ramp to USH 51

G Shoulder Closures

Shoulders may be closed if required by the work operation, but the right and left shoulder may not be closed in the same area at the same time.

Install traffic control for shoulder closures for beam guard work as shown on the plans.

5. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying IH 39 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 24, 2013 to 6:00 AM Tuesday, May 28, 2013 for Memorial Day;
- From noon Wednesday, July 3, 2013 to 6:00 AM Tuesday, July 8, 2013 for Independence Day;
- From noon Friday, August 30, 2013 to 6:00 AM Tuesday, September 3, 2013 for Labor Day;
- From noon Friday, October 11, 2013 to 6:00 AM Tuesday, October 15, 2013 for Columbus Day.

107-005 (20050502)

6. Utilities.

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

On this project the Administrative Rule TRANS 220 utility was not followed.

Utility conflicts within the limits of this project are not anticipated, however there are underground and aerial utility facilities. Coordinate construction activities with a call to Diggers Hotline, or a direct call to the utilities for the underground facilities in the area as required per statutes. Use caution to ensure the integrity of underground utility facilities and maintain OSHA code clearances from overhead facilities at all times.

The following utilities have facilities within the project area:

Alliant Energy (electric), contact Jason Hogan AT&T Legacy (communication), contact Carl Donahue AT&T Wisconsin (communication), contact Scott Grinde	(608) 458-4871 (847 420-9115 (920) 735-3240
ATC Management, Inc. (electric), contact Mike Olsen	(920) 660-2390
Charter Communications (communication),	
contact Brandon Storm	(608) 374-3198
Madison Gas and Electric Company (electric and gas),	
contact Tim Statz	(608) 252-4708
Madison Metropolitan Sewerage District (sewer),	
contact Eric Hjellen	(608) 347-3613
Madison Water Utility (water), contact Dennis Cawley	(608) 266-4651
McLeod USA Telecommunication Services Inc.	
(communication), contact Jim Birkenheier	(414) 207-2986
Village of DeForest (sewer and water),	
contact Deane Baker	(608) 846-6751,
	Ext. 1402
Windsor Sanitary District #1 (sewer), contact Jeffrey Bartosiak	(608) 846-7998
Wisconsin Department of Transportation (communication), contact Jeff Madson	(414) 225-3723

7. Other Contracts.

The department plans to contract for the reconstruction of USH 51 from Reardon Road to CTH V under Project 6020-02-71, which work will be in progress concurrently with work under this contract. Coordination is required for traffic control. See the Traffic article for details. Contact Bob Lex, WisDOT Project Manager, phone (608) 246-5622 for coordination.

The department plans to contract for the replacement of the STH 19 structure over Token Creek under Project 6085-00-76, which work will be in progress concurrently with work under this contract. Coordination is required for traffic control. See the Traffic article for details. Contact Mike Rampetsreiter, WisDOT Project Manager, phone (608) 246-7917 for coordination.

8. Railroad Insurance and Coordination.

A Description

Comply with standard spec 107.17 for all work affecting Wisconsin & Southern Railroad Company property and any existing tracks.

A.1 Railroad Insurance Requirements

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

Notify evidence of the required coverage, and duration to Tim Karp at 5300 North 33rd Street, Milwaukee, WI 53209-9229. Include the following information on the insurance document:

Project 1010-00-72 Route Name IH 39, Dane County Crossing ID 392211C Railroad Subdivision Waterloo Railroad Milepost 161.4

A.2 Work by Railroad

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

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

Contact Ben Meighan, Superintendent of Maintenance of Way, Wisconsin and Southern Railroad Co., 1890 East Johnson Street, Madison, WI 53704, TELEPHONE (414) 438-8820, Ext 4201, FAX (608) 243-9225, email <u>bmeighan@wsorrailroad.com</u>, for consultation on railroad requirements during construction.

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

A.4 Temporary Grade Crossing

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

A.5 Train Operation

Approximately zero passenger trains and two through freight trains operate daily through the construction site. Through freight trains operate at up to 10 mph.

9. Erosion Control.

Supplement standard spec 107.20 with the following:

Do not disturb or store any materials or equipment beyond the slope intercepts in the wetland areas shown on the plans without approval from the engineer.

10. Intelligent Transportation Systems (ITS) Control of Materials.

Standard spec 106.2 – Supply Source and Quality

Supplement standard spec 106.2 with the following:

The department will furnish a portion of equipment to be installed by the contractor. This department-furnished equipment includes the following:

Department-Furnished Items
Pole-Mount Cabinet
Terminal Server
Dynamic Message Sign
Dynamic Message Sign Controller
900 Mhz Serial Radio
Yagi Antenna

Pick-up small department-furnished equipment, such as communications devices, cameras, and controllers, from the department's Statewide Traffic Operations Center (STOC), 433 W. St. Paul Avenue, Milwaukee, WI 53203 at a mutually agreed upon time during normal state office hours. Contact the department's STOC at (414) 227-2166 to coordinate pick-up of equipment.

Large department-furnished equipment, such as Dynamic Message Signs will be delivered by the supplier to a contractor-controlled site within Dane County. Delivery will not necessarily be in a "just in time" manner. Store the equipment until field installation. Provide location details and a contact for delivery coordination upon receiving the contract's Notice to Proceed.

Transportation of the equipment between the electric shop and the field or interim location(s) shall be the responsibility of the contractor.

Standard spec 106.3 – Approval of Materials

Supplement standard spec 106.3 with the following:

Design/Shop Drawings

Prior to the purchase and/or fabrication of any of the components listed herein, and for any non-catalog item shown on the Material and Equipment List specified above, and no more than 30 days after notice to proceed, submit five copies of design drawings and shop drawings, as required, to the department for review. The items and the drawings that represent them shall meet the requirements of the standard specifications.

Design drawing submissions shall consist of signed and certified designs, design drawings, calculations, and material specifications for required items.

Shop drawings will be required for, but not limited to the following:

- 1. Mounting assemblies for the vehicle speed and classification sensors, including their attachment to the structure.
- 2. Mounting LED warning signs to the sign structure.
- 3. Mounting detail for dynamic message signs.
- 4. Any contractor-designed structure or foundation.

The department will complete its review of the material within 30 days from the date of receipt of the submission, unless otherwise specified. The department will advise the contractor, in writing, as to the acceptability of the material submitted. The department may determine that if no exceptions were taken for the item, it is approved, and no further action is required by the contractor; or the item may be partially or totally rejected, in which case modify and/or amend the submittal as required by the department and resubmit the item within 14 days. At this time, the review and approval cycle described above will begin again.

670-005 (20100709)

11. Intelligent Transportation Systems – General Requirements.

A Description

A.1 General

This contract includes furnishing and installing elements for an Intelligent Transportation System (ITS) in or along the existing roadway as shown on the plans.

Unusual aspects of this project include:

- 1. The project includes working on cables and equipment that are carrying data between roadside equipment and the department's Statewide Traffic Operations Center (STOC). Interruption of this service is not expected to perform this work. If an interruption is determined necessary, it must be done on a weekend, and must be done in a way that minimizes communication outages for the existing equipment. Notify the department's STOC at least 48 hours in advance of the planned interruption.
- 2. The department will furnish some of the equipment to be installed. Make a reasonable effort to discover defects in that equipment prior to installing it.

A.2 Surge Protection

Equip every ungrounded conductor wire entering or leaving any equipment cabinet with a surge protector. For purposes of this section, multiple cabinets on a single pole or foundation are considered a single cabinet.

B Materials

B.1 General

Only furnish equipment and component parts for this work that are new and have high quality workmanship. All controls, indicators, and connectors shall be clearly and permanently labeled in a manner approved by the engineer. All equipment of each type shall be identical.

All electrical equipment shall conform to the standards and requirements of the Wisconsin Electrical Code, the National Electrical Manufacturers Association (NEMA), National Electric Safety Council (NESC), Underwriter's Laboratory Inc. (UL) or the Electronic Industries Association (EIA), when applicable. All materials and workmanship shall conform to the requirements of the National Electrical Code (NEC), Rural Electrification Administration (REA), Standards of the American Society for Testing and Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO), requirements of the plans these special provisions, the standard specifications, and to any other codes, standards, or ordinances that may apply. All system wiring, conduit, grounding hardware and circuit breakers shall be in conformance with the National Electrical Code. Whenever reference is made to any of the standards mentioned, the reference shall be considered to mean the code, ordinance, or standard that is in effect at the time of the bid advertisement.

B.2 Outdoor Equipment

All conductive connectors, pins (except pins connected by soldering), and socket contacts shall be gold plated. Acrylic conformal coating shall protect each circuit board side that has conductive traces. Except for integrated circuits containing custom firmware, all components shall be soldered to the printed circuit board.

To prevent galvanic corrosion, all connections between dissimilar metals shall incorporate a means of keeping moisture out of the connection. Where the connection need not conduct electricity, interpose a non-absorbing, inert material or washer between the dissimilar metals. Use nonconductive liners and washers to insulate fasteners from dissimilar metals. Where the connection must conduct electricity, use a conductive sealant between the dissimilar metals. Alternatively, use an insulating gasket and a bond wire connecting the two metal parts.

B.3 Custom Equipment

Equipment that is not part of the manufacturer's standard product line, or that is made or modified specifically for this project, shall conform to the following requirements:

Where practical, electronics shall be modular plug-in assemblies to facilitate maintenance. Such assemblies shall be keyed to prevent incorrect insertion of modules into sockets.

All components shall be available from multiple manufacturers as part of the manufacturers' standard product lines. All must be clearly labeled with the value, part number, tolerance, or other information sufficient to enable a technician to order an exact replacement part.

Lamps used for indicator purposes shall be light-emitting diodes.

The printed circuit boards shall be composed of "two-ounce" copper on 1/16-inch thick fiberglass epoxy or equivalent type construction. Holes that carry electrical connections from one side of the boards to the other shall be completely plated through. Multilayer printed circuit boards shall not be used. The name or reference number used for the board in the drawings and maintenance manuals supplied to the department shall be permanently affixed to each board.

All components shall be mounted so that the identifying markings are visible without moving or removing any part, if practical.

B.3 Environmental Conditions

Equipment shall continue to operate as specified under the following ranges of environmental conditions, except as noted in the specifications for individual pieces of equipment.

- 1. **Vibration and Shock:** Vehicle speed and classification sensors and any other equipment mounted atop poles or on structures shall not be impaired by the continuous vibration caused by winds (up to 90 mph with a 30 percent gust factor) and traffic.
- 2. **Duty Cycle:** Continuous
- 3. **Electromagnetic Radiation:** The equipment shall not be impaired by ambient electrical or magnetic fields, such as those caused by power lines, transformers, and motors. The equipment shall not radiate signals that adversely affect other equipment.
- 4. Electrical Power:
 - a. **Operating power:** The equipment shall operate on 120-volts, 60-Hz, single-phase unless otherwise specified. It shall conform to its specified performance requirements when the input voltage varies from 89 to 135 volts and the frequency varies +3 Hz.
 - b. **High frequency interference:** The equipment operation shall be unaffected by power supply voltage spikes of up to 150 volts in amplitude and 10 microseconds duration.

c. Line voltage transients: The equipment operation shall be unaffected by voltage transients of plus or minus 20 percent of nominal line voltage for a maximum duration of 50 milliseconds. Equipment in the field shall meet the power service transient requirements of NEMA Standard TS-2 when connected to the surge protectors in the cabinets.

5. Temperature and Humidity:

- a. **Field equipment:** Equipment in the field shall meet the temperature and humidity requirements of NEMA Standard TS-2. Liquid crystal displays shall be undamaged by temperatures as high as 165 degrees F, and shall produce a usable display at temperatures up to 120 degrees F.
- b. Equipment in Controlled Environments shall operate normally at any combination of temperatures between 50 degrees F and 100 degrees F, and humidity's between 5 percent and 90 percent, non-condensing, and with a temperature gradient of 9 degrees F per hour.

B.4 Patch Cables and Wiring

All cables and wiring between devices installed in a single cabinet, or in separate cabinets sharing a single concrete base, will be considered incidental to the installation of the devices and no separate payment will be made for them. It is anticipated that this will include fiber optic patch cables between termination panels and Ethernet switches, 10 / 100 MBPS Ethernet cables, RS-232 cables between individual devices and terminal servers, and power cables between individual devices and power sources within the cabinets.

B.5 Surge Protection

Low-voltage signal pairs, including twisted pair communication cable(s) entering each cabinet shall be protected by two-stage, plug-in surge protectors and shall be installed on both ends of camera control cables. The protectors shall meet or exceed the following minimum requirements:

- 1. The protectors shall suppress a peak surge current of up to 10k amps.
- 2. The protectors shall have a response time less than one nanosecond.
- 3. The protector shall clamp the voltage between the two wires at a voltage that is no more than twice the peak signal voltage, and clamp the voltage between each wire and ground at 50 volts.
- 4. The first stage of protection shall be a three-element gas discharge tube, and the second stage shall consist of silicon clamping devices.
- 5. The protector shall also contain a resettable fuse (PTC) to protect against excessive current.
- 6. There shall be no more than two pairs per protector.
- 7. It shall be possible to replace the protector without using tools.

Cables carrying power to curve signs shall be protected at the cabinet by grounded metal oxide varistors of appropriate voltages. The varistors must be at least 0.8 inch in diameter.

C Construction

C.1 Thread Protection

Provide rust, corrosion, and anti-seize protection at all thread assemblies of metallic parts by coating (non-spray) the mating surfaces with an approved compound. Failure to use an approved compound will result in no payment for the items to which coating was to have been applied.

C.2 Cable Installation

When installing new cables into conduits containing existing cables, remove the existing cables and reinstall the existing cables simultaneously with the new cables. Take every precaution necessary to protect the existing cables. In the event of avoidable damage to the existing cables, replace all damaged cables, in-kind, at no additional expense to the department. When cables are pulled into conduit, use a cable pulling lubricant approved by the cable manufacturer. Submit documentation supporting manufacturer approval of the lubricant to the engineer.

C.3 Wiring

Every conductor, except a conductor contained entirely within a single piece of equipment, must terminate either in a connector or on a terminal block. Provide and install the connectors and terminal blocks where needed, without separate payment. Use approved splice kits instead of connectors and terminal blocks for underground power cable splices.

Permanently label and key connectors to preclude improper connection. Obtain prior engineer approval for the labeling method(s) prior to use.

Terminal blocks must be affixed to panels that permanently identify the block and what wire connects to each terminal. This may be accomplished by silk screening or by installing a laminated printed card under the terminal block, with the labels on portions of the card that extend beyond the block. Installation of terminal blocks by drilling holes in the exterior wall of the cabinet is not acceptable.

Use barriers to protect personnel from accidental contact with all dangerous voltages.

Do not install conductors carrying AC power in the same wiring harness as conductors carrying control or communication signals.

Arrange wiring, including fiber optic pigtails, so that any removable assembly can be removed without disturbing wiring that is not associated with the assembly being removed.

Communication and control cables may not be spliced underground, except where indicated on the plans.

Cables in the Statewide Traffic Operations Center or in communication hubs, which are not contained within a single cabinet, shall have at least 10 feet of slack.

C.4 System Operations

If the contractor's operations unexpectedly interrupt Intelligent Transportation Systems (ITS) service, notify the engineer immediately and restore service within 24 hours. Repair all damaged facilities to the condition existing before the interruption. If service is not restored within 24 hours, the department may restore service to any operating device and deduct restoration costs from payments due the contractor.

C.5 Surge Protection

Arrange the equipment and cabinet wiring to minimize the distance between each conductor's point of entry and its protector. Locate the protector as far as possible from electronic equipment. Ensure that all wiring between the surge protectors and the point of entry is free from sharp bends.

D Measurement

No separate measurement will be made for the work described in this article.

E Payment

No separate payment will be made for the work described in this article. All work described in this article shall be included under the ITS items in the contract. 670-010 (20100709)

12. Intelligent Transportation Systems – Conduit.

Supplement standard spec 671.2 with the following:

671.2.4 Locate Wire

Furnish and install a No. 14 AWG stranded copper wire for future locate purposes through each conduit run. Connect the locate wire by using a wire nut at each pull box, manhole, or other access point. Alternatively, use a single wire through the access points. All material furnished under this item shall meet the requirements of standard spec 655. 671-005 (20100630)

13. Select Borrow.

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

Material

Furnish and use material that consists of granular material meeting the following requirements: All aggregate particles shall have a dimension less than 12 inches, measured on any face. The material passing the No. 4 sieve shall have a maximum of 25% by weight passing the No. 200 sieve. 208-005 (20031103)

14. QMP Base Aggregate.

A Description

A.1 General

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

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

A.2 Contractor Testing for Small Quantities

- (1) The department defines a small quantity, for each individual Base Aggregate bid item, as a plan quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.
- (2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:
 - 1. The contractor need not submit a full quality control plan but shall provide an organizational chart to the engineer including names, telephone numbers, and current certifications of all persons involved in the quality control program for material under affected bid items.
| 2 | Divide the aggregate | into uniforml | v sized sublo | ts for testing a | s follows |
|----|----------------------|----------------|---------------|------------------|---------------|
| 4. | Divide the aggregate | into unitorini | y sized subio | to for testing t | 15 10110 W S. |

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

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

- ^[2] For 3-inch material, obtain samples at load-out.
- ^[3] If the actual quantity overruns 9000 tons, create overrun sublots to test at a rate of one additional placement test for each 3000 tons, or fraction of 3000 tons, of overrun.
- 3. No control charts are required. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.
- 4. Department verification testing is optional for quantities of 6000 tons or less.
- (3) Material represented by a sublot with any property outside the specification limits is nonconforming. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

B Materials

B.1 Quality Control Plan

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

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

B.2 Personnel

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

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

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

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

B.3 Laboratory

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

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

B.4 Quality Control Documentation

B.4.1 General

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

B.4.2 Records

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

B.4.3 Control Charts

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

B.5 Contractor Testing

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

- (5) Test fracture for each gradation test until the fracture running average is above the lower warning limit. Subsequently, the contractor may reduce the frequency to one test per 10 gradation tests if the fracture running average remains above the warning limit.
- (6) Test the liquid limit and plasticity index for the first gradation test. Subsequently, test the liquid limit and plasticity index a minimum of once per 10 gradation tests.

B.6 Test Methods

B.6.1 Gradation

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

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

- (2) For 3-inch base, if 3 consecutive running average points for the percent passing the No. 200 sieve are 8.5 percent or less, the contractor may use an unwashed analysis. Wash at least one sample out of 10. If a single running average for the percent passing the No. 200 sieve exceeds 8.5 percent, resume washed analyses until 3 consecutive running average points are again 8.5 percent passing or less.
- (3) Maintain a separate control chart for each sieve size specified in standard spec 305 or standard spec 310 for each base aggregate size, source or classification, and type. Set control and warning limits based on the standard specification gradation limits as follows:
 - 1. Control limits are at the upper and lower specification limits.
 - 2. There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.
 - 3. Dense graded warning limits, except for the No. 200 sieve, are 2 percent within the upper and lower control limits. Warning limits for the No. 200 sieve are set 0.5 percent within the upper and lower control limits.
 - 4. Open graded warning limits for the 1-inch, 3/8-inch, and No. 4 sieves are 2 percent within the upper and lower control limits. Upper warning limits for the No. 10, No. 40, and No. 200 sieves are 1 percent inside the upper control limit.

B.6.2 Fracture

- (1) Test fracture conforming to CMM 8.60. The engineer will waive fractured particle testing on quarried stone.
- (2) Maintain a separate fracture control chart for each base aggregate size, source or classification, and type. Set the lower control limit at the contract specification limit, either specified in another special provision or in table 301-2 of standard spec 301.2.4.5. Set the lower warning limit 2 percent above the lower control limit. There are no upper limits.

B.6.3 Liquid Limit and Plasticity

- (1) Test the liquid limit and plasticity according to AASHTO T 89 and T 90.
- (2) Ensure the material conforms to the limits specified in standard spec table 301-2.

B.7 Corrective Action

B.7.1 General

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

B.7.2 Placement Corrective Action

- (1) Do not blend additional material on the roadbed to correct gradation problems.
- (2) Notify the engineer whenever the running average exceeds a warning limit. When 2 consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
 - 1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
 - 2. For fracture, increase the QC testing frequency to at least one test per gradation test.
- (3) If corrective action improves the property in question such that the running average after 4 additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after 4 additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.
- (4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.
- (5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:

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

B.8 Department Testing

B.8.1 General

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

B.8.2 Verification Testing

B.8.2.1 General

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

B.8.3 Independent Assurance

- (1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform an IA review according to the department's independent assurance program. That review may include one or more of the following:
 - 1. Split sample testing.
 - 2. Proficiency sample testing.
 - 3. Witnessing sampling and testing.
 - 4. Test equipment calibration checks.
 - 5. Reviewing required worksheets and control charts.
 - 6. Requesting that testing personnel perform additional sampling and testing.
- (2) If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in B.9.

B.9 Dispute Resolution

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

C (Vacant)

D (Vacant)

E Payment

- (1) Costs for furnishing 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)

15. Base Aggregate Dense ³/₄-Inch.

This work shall be in accordance to the pertinent requirements of standard spec 305, except that the material used in the top 4 inches of all unpaved portions of the shoulders as shown in the plans shall consist of crushed stone.

16. Base Aggregate Dense 1 ¹/₄-Inch.

Revise standard spec 305.2.2.1 as follows:

Use 1 ¹/₄-Inch base that conforms to the following gradation requirements.

rercentage by weight passing		
Sieve Size	Percentage of Mass Passing	
1 1/4 inch	95 - 100	
1 inch		
3/4 inch	70 - 90	
3/8 inch	45 – 75	
No. 4	30-60	
No. 10	20-40	
No. 40	7-25	
No. 200	2 - 12 ^{[1], [3]}	

Percentage	hv	weight	nassing
I CI CCITTAGC	IJУ	weight	passing

^[1] Limited to a maximum of 8% for base placed between old and new pavement.

^[3] 3 - 10 percent passing when base is \geq 50% crushed gravel

17. Select Crushed Material.

Revise standard spec 312.2 as follows:

Use select crushed material that conforms to the following gradation requirements:

Sieve Size	Percentage of Mass Passing
5-inch	90 - 100
1 ½ -inch	0 - 30
No. 10	0 - 10

18. Dust Control.

When engaged in roadway cleaning operations, the contractor shall use equipment having vacuum or water spray mechanisms to eliminate the dispersion of particulate matter into the atmosphere. If vacuum equipment is employed, it must have a suitable self-contained particulate collector to prevent discharge from the collection bin into the atmosphere. Payment for cleaning operations and equipment employed in cleaning operations is incidental to the contract.

19. Removing Delineators, Item 204.9060.S.01.

A Description

This special provision describes removing delineators in accordance to the pertinent provisions of standard spec 204 and as hereinafter provided.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Removing Delineators as a unit.

E Payment

Supplement standard spec 204.5 to include the following:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.01	Removing Delineators	Each
204-025 (20041005)	-	

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

A Description

- (1) This special provision describes profiling pavements with a non-contact profiler, locating areas of localized roughness, and determining the International Roughness Index (IRI) for each wheel path segment.
- (2) Profile the final riding surface of all mainline pavements, bridges, approaches, and railroad crossings. Roundabouts, and pavements within 150 feet of the points of curvature of roundabout intersections, are excluded from the testing requirements of this provision.
- (3) Pavements that are excluded from localized roughness according to C.5.2(1), bridges, and roundabout intersections are subject to engineer-directed straightedging according to the standard specifications. All other surfaces being tested under this provision are exempt from straightedging requirements.

B (Vacant)

C Construction

C.1 Quality Control Plan

- (1) Submit a written quality control plan to the engineer at or before the pre-construction conference. Ensure that the plan provides the following elements:
 - 1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of all quality control personnel.
 - 2. The process by which quality control information and corrective action efforts will be disseminated to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
 - 3. The methods and timing used for monitoring and/or testing ride quality throughout the paving process.
 - 4. The evaluation process that will be used to make improvements to the construction operations if poor ride quality is found during the process control testing.
 - 5. The methods that will be used to ensure a smooth pavement transition when matching into existing surfaces such as bridges, bridge approaches, or railroad crossings.
 - 6. The segment locations of each profile run used for acceptance testing.
 - 7. The approximate timing of acceptance testing in relation to the paving operations.

C.2 Personnel

(1) Have a profiler operator, certified under the department's highway technician certification program (HTCP), operate the equipment, collect the required data, and document the results using the methods taught in the HTCP profiling course.

C.3 Equipment

- (1) Furnish a profile-measuring device capable of measuring IRI from the list of department-approved devices published on the department's web site: <u>http://roadwaystandards.dot.wi.gov/standards/qmp/index.htm</u>
- (2) Unless the engineer and contractor mutually agree otherwise, arrange to have a calibrated profiler available when paving the final riding surface. Calibrate the profiler according to the manufacturer's recommendations. Provide the engineer with a copy of the most recent calibration results, signed by the certified profiler operator.
- (3) Perform daily calibration verification of the profiler using test methods according to the manufacturer's recommendations. Notify the engineer prior to performing the calibration verification. If the engineer requests, arrange to have the engineer observe the calibration verification and operation. Maintain records of the calibration verification activities, and provide the records to the engineer upon request.

C.4 Testing

C.4.1 Run and Reduction Parameters

(1) Enter the equipment-specific department-approved filter settings and parameters listed on the department's ride web site.

C.4.2 Contractor Testing

- (1) Operate profilers within the manufacturer's recommended speed tolerances. Perform all profile runs in the direction of travel. Measure the longitudinal profile of each wheel track of each lane. The wheel tracks are 6.0 feet apart and centered in the traveled way of the lane.
- (2) Coordinate with the engineer to schedule profile runs for acceptance. The department may require testing to accommodate staged construction or if corrective action may be required.
- (3) Measure the profiles of each standard or partial segment. Define primary segments starting at a project terminus and running contiguously along the mainline to the other project terminus. Field-locate the beginning and ending points for each profile run. When applicable, align segment limits with the sublot limits used for testing under the QMP Concrete Pavement specification. Define segments one wheel path wide and distinguished by length as follows:
 - 1. Standard segments are 500 feet long.
 - 2. Partial segments are less than 500 feet long.
- (4) Treat partial segments as independent segments.

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

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

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

C.4.3 Verification Testing

- (1) The department may conduct verification testing (QV) to validate the quality of the product. A certified HTCP profiler technician will perform the QV testing. The department will provide the contractor with a listing of the names and telephone numbers of all verification personnel for the project.
- (2) The department will notify the contractor before testing so the contractor can observe the QV testing. Verification testing will be performed independent of the contractor's QC work using separate equipment from the contractor's QC tests. The department will provide test results to the contractor within 1 business day after the department completes the testing.
- (3) The engineer and contractor will jointly investigate any testing discrepancies. The investigation may include additional testing as well as review and observation of both the department's and contractor's testing procedures and equipment. Both parties will document all investigative work.
- (4) If the contractor does not respond to an engineer request to resolve a testing discrepancy, the engineer may suspend production until action is taken. Resolve disputes as specified in C.6.

C.4.4 Documenting Profile Runs

(1) Compute the IRI for each segment and analyze areas of localized roughness using the ProVAL software. Within 5 business days after completing a final acceptance profile run, submit a copy of the ProVAL smoothness assurance report showing the IRI for each segment and the areas of localized roughness exceeding an IRI of 175 in/mile. The ProVAL software and department-specified inputs are available on the department's web site:

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

- (2) As part of the profiler software outputs and ProVAL reports, document the areas of localized roughness and the locations of individual features including construction joints, structure limits, design features, utility fixtures, and other features that might affect the department's evaluation of ride quality. Field-locate the areas of localized roughness prior to the engineer's assessment for corrective actions.
- (3) Within 5 business days after completing profiling of the pavement covered under this special provision, unless the engineer and contractor mutually agree to a different timeline, submit the electronic ProVAL project file containing the .ERD files for each profiler acceptance run. Submit profile data using the department's Materials Reporting System (MRS) software available on the department's web site:

http://www.atwoodsystems.com/mrs

C.5 Corrective Actions

C.5.1 General

(1) Correct the ride as the engineer directs. The department will independently assess whether a repair will help or hurt the long-term pavement performance and/or public perception of the ride before deciding on corrective action.

C.5.2 Corrective Actions for Localized Roughness

- (1) Apply localized roughness requirements to all pavements, including HMA III, PCC III, HMA IV, and PCC IV; except localized roughness requirements will not be applied to pavements within 25 feet of the following surfaces if they are not constructed under this contract: bridges, bridge approaches, or railroad crossings. The department may direct the contractor to make corrections to the pavement within the 25-foot exclusionary zones and will compensate the contractor for the extra work.
- (2) The engineer will review each individual wheel track for areas of localized roughness. The engineer will assess areas of localized roughness that exceed an IRI of 175 in/mile and do one of the following for each location:
 - 1. Direct the contractor to correct the area to minimize the effect on the ride.
 - 2. Leave the area of localized roughness in place with no pay reduction.
 - 3. Except for HMA IV and PCC IV segments, assess a pay reduction as follows for each location in each wheel path:

Localized Roughness IRI	Pay Reduction ^[1]
(in/mile)	(dollars)
> 175	(Length in Feet) x (IRI – 175)

- ^[1] A maximum \$250 pay reduction may be assessed for locations of localized roughness that are less than or equal to 25 feet long. Locations longer than 25 feet may be assessed a maximum pay reduction of \$10 per foot.
- (3) The engineer will not direct corrective action or assess a pay reduction for an area of localized roughness without independent identification of that area as determined by physically riding the pavement. For corrections, use only techniques the engineer approves.
- (4) Re-profile corrected areas to verify that the IRI is less than 140 in/mile after correction. Submit a revised ProVAL smoothness assurance report for the corrected areas to validate the results.

C.5.3 Corrective Actions for Excessive IRI

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

to confect that 5	eginent. Confect the segment intal surface as fono ws.
HMA I:	Correct to an IRI of 60 in/mile using whichever of the
	following methods the engineer directs:
	Mill and replace the full lane width of the riding surface
	excluding the paved shoulder.
	Correct the full lane width using techniques approved by
	the engineer.
HMA II:	Correct to an IRI of 85 in/mile using whichever of the
	following methods the engineer directs:
	Mill and replace the full lane width of the riding surface
	excluding the paved shoulder.
	Correct the full lane width using techniques approved by
	the engineer.
PCC II:	Correct to an IRI of 85 in/mile using whichever of the
	following methods the engineer directs:
	Continuous diamond grinding of the full lane width of
	the riding surface including adjustment of the paved
	shoulders
	Correct the full lane width using techniques approved by
	the engineer.
	-

(2) Re-profile corrected segments to verify that the final IRI meets the above correction limits and there are no areas of localized roughness. Submit a revised ProVAL smoothness assurance report for the corrected areas to validate the results. Segments failing these criteria after correction are subject to the engineer's right to adjust pay for non-conforming work under standard spec 105.3.

C.6 Dispute Resolution

- (1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate testing procedures, and perform additional testing.
- (2) If the project personnel cannot resolve a dispute and the dispute affects payment or could result in incorporating nonconforming pavement, the department will use third party testing to resolve the dispute. The department's Quality Assurance Unit, or a mutually agreed on independent testing company, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent tester. The department may use third party tests to evaluate the quality of questionable pavement and determine the appropriate payment.

D Measurement

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

E Payment

E.1 Payment for Profiling

(1) Costs for furnishing and operating the profiler, documenting profile results, and correcting the final pavement surface are incidental to the contract.

E.2 Pay Adjustment

(1) The department will pay	ncentive for ride under the following bid item:	
ITEM NUMBER	DESCRIPTION	UNIT
440.4410.S	Incentive IRI Ride	DOL

- (2) Incentive payment is not limited, either up or down, to the amount the schedule of items shows.
- (3) The department will administer disincentives for ride under the Disincentive IRI Ride administrative item.
- (4) The department will not assess disincentive on HMA III or PCC III segments. Incentive pay for HMA III and PCC III segments will be according to the requirements for the category of the adjoining segments.

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

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

(6) The department will adjust pay for 500-foot long standard segments nominally one wheel path wide using equation "QMP 1.03" as follows:

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

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

HMA IV and PCC IV		
Initial IRI Pay Adjustment ^{[1] [2]}		
(inches/mile)	(dollars per standard segment)	
< 50	250	
\geq 50 to < 75	750 – (10 x IRI)	
≥75	0	

^[1] If the engineer directs placing upper layer asphaltic mixtures between October 15 and May 1 for department convenience as specified in standard spec 450.3.2.1(5), the department will not adjust pay for ride on pavement the department orders the contractor to place when the temperature, as defined in standard spec 450.3.2.1(2), is less than 36 F.

- ^[2] If the engineer directs placing concrete pavement for department convenience, the department will not adjust pay for ride on pavement the department orders the contractor to place when the air temperature falls below 35 F.
- (7) The department will prorate the pay adjustment for partial segments based on their length.
 440,010 (20100700)

440-010 (20100709)

21. Warranted HMA Pavement Overlay Mainline, Item 495.0100.S; Warranted HMA Pavement Overlay Ancillary, Item 495.0200.S.

A Description

A.1 General

(1) Construct and warrant HMA pavement overlay conforming to the lines and grades shown on the plans as directed by the engineer. Establish the job mix formula, select all materials and be responsible for the pavement performance and warranty work on the finished pavement for the warranty period defined in section B.1. The provisions of the warranty work apply to all HMA mixtures placed under the Warranted HMA Pavement Overlay bid items, standard spec 450 through standard spec 490 are deleted with the exception of standard spec 450.3.2.9.

A.2 Warranted HMA Pavement Overlay Mainline

(1) This bid item consists of all HMA pavement placed on both the mainline traveled way and its adjacent mainline shoulders in accordance to the typical finished sections.

A.3 Warranted HMA Pavement Overlay Ancillary

(1) This bid item consists of all HMA pavement placed on side roads, private and public entrances, ramps, tapers, turn lanes, the new pavement placed within 50-feet of a bridge deck, and other locations not described as Warranted HMA Pavement Overlay Mainline.

B Warranty

B.1 Warranty Period

(1) The warranty period will begin when the warranted pavement is completed and opened to public traffic. The warranty period will end on November 1 of the year three years after the year during which the warranted pavement was completed and opened to public traffic.

B.2 Warranty

(1) The necessary warranty bond for the warranted HMA pavement items will be in effect for the entire warranty period defined in section B.1. The bonding company must have an AM Best rating of "A-" or better and the contractor will provide proof of the bond commitment before execution of the contract.

- (2) The warranty bond will be \$487,000 for the warranted HMA pavement. The bond will insure the proper and prompt completion of required warranty work for the duration of the warranty period, including payments for all labor, equipment, and materials used according to this specification.
- (3) Provide documentation that the warranty bond will remain in effect for the duration of the warranty period. For the first year of the warranty bond, provide documentation that the contract bond, which remains in effect for one year beyond the completion of the project, will also include warranty work, as described in section C.5.
- (4) If a subcontractor places the warranted pavement, the subcontractor may provide the warranty bond for the remaining warranty period after expiration of the contract bond. If the subcontractor does provide the bond, it shall be a dual obligee bond, naming the contractor and the Wisconsin Department of Transportation as obligees. The subcontractor will provide documentation that the warranty bond will remain in effect for the portion of the warranty period after expiration of the contract bond.
- (5) Failure of the contractor, subcontractor or its surety to issue or renew the warranty bond will be considered a default and will result in forfeiture of the face amount of the bond to the department.
- (6) All warranty work will be as prescribed in section C.5. At the end of the warranty period, the contractor will be relieved of the responsibility to perform further warranty work, provided all previous warranty work has been completed.

C Quality, Quality Control, and Documentation

C.1 Quality Control Plan

- (1) Prior to construction, provide the engineer with a Quality Control Plan. The Quality Control Plan shall outline the contractor's material and construction control processes. At a minimum the plan shall include each of the following:
 - 1. A list of the quality control tests that will be used to control the material and construction quality.
 - 2. The quality control sampling, testing, and documentation frequencies.
 - 3. The HMA pavement job mix formulas (JMF) planned for the project and the method used to develop the JMF. Submit the JMF for tracking purposes according to the department's test method 1559.
 - 4. A list of project materials.
- (2) At the completion of the project, provide documentation of the project to the engineer. This documentation shall consist of all quality control test results performed to control materials and construction, and any changes made to typical widths and depths of subgrade, subbase, base, and surface.

C.2 Conflict Resolution Process

(1) Conflicts should be resolved in a meeting involving up to five contractor representatives and up to five department representatives. Any other individuals besides the five allowed from each party would need to be agreed to by both parties. During this meeting both parties will present their case, any supporting documentation, project related information, relevant costs, or any other information that the party deems necessary to support their case. All reasonable efforts to come to an agreement on how to proceed be should be made at this meeting. If an agreement cannot be reached, the decision of the department will control. If the contractor disagrees with the resolution reached, the contractor can appeal the decision utilizing the claim process described in standard spec 105.13.

C.3 Pavement Condition Surveys, Pavement Evaluations, and Contractor Monitoring

C.3.1 Warranted Mainline HMA Pavement Condition Surveys

- (1) The department will conduct warranted mainline HMA pavement condition surveys. The region or contractor may perform visual pavement condition surveys of the mainline pavement at any time. Visible distress will be measured according to the department's latest Pavement Distress Survey Procedures Manual, which references to ASTM D6433-07, Standard Practice for Road and Parking Lots Pavement Condition Index Surveys, Appendix X1. *Distress in Asphalt Pavements*.
- (2) The department will conduct mainline pavement condition surveys between May 1 and August 15 according to the following schedule, at a minimum:
 - 1. An initial mainline pavement condition survey, to occur during the first year of the warranty period.
 - 2. A final mainline pavement condition survey, to occur during the final year of the warranty period.
 - 3. During the remaining year of the warranty period, the department will conduct mainline pavement condition surveys according to the normal surveying cycle of the unit. The unit's normal surveying cycle is dependent on the location of the highway.
- (3) The department will conduct additional mainline pavement condition surveys if they are deemed necessary.
- (4) Mainline pavement condition surveys will be conducted as follows. The mainline pavement will be divided into nominal one-mile sections, using the department's reference point location procedure for division of the highway system. Two 0.1-mile segments in each mile will be evaluated for pavement condition. One of the segments evaluated will be between 0.3 and 0.4 miles from the start of the one-mile section. The department will randomly select the second 0.1-mile segment and evaluate this segment in all subsequent surveys. A segment shall be 1 lane wide by 0.1 mile (528 feet) long. Each lane of Warranted HMA Pavement will be evaluated separately with its own 0.1 mile segments.

- (5) If areas other than the surveyed segments are suspected of meeting or exceeding a threshold level as defined in section C.4, the department may perform a condition survey in additional segments of the project. In this case, the department will divide the entire mainline pavement into 0.1-mile segments and conduct a condition survey in any, or all, segment(s), as requested.
- (6) All mainline pavement condition survey results will be made available for access by the region, statewide bureaus, contractor and FHWA.
- (7) If at any point during the warranty period a threshold level as defined in section C.4 is met or exceeded in the mainline pavement and the contractor agrees with the validity of the condition survey results, the contractor will remedy the distress. Remedial work shall be performed according to section C.5. If a threshold level is met in the mainline pavement and the contractor does not agree with the validity of the condition survey results, the need for remedial work, or the type of remedial work requested, written notification of the dispute will be made to the engineer. The Conflict Resolution Process will resolve the dispute.

C.3.2 Warranted Ancillary HMA Pavement Evaluations

- (1) The department or contractor may review and evaluate the warranted ancillary HMA pavement at any time during the warranty period. The department's latest Pavement Distress Survey Procedures Manual, PCI Method, will be used to determine and measure the different types of distress. The ancillary pavement will be evaluated for performance in regards to its intended purpose.
- (2) If at any point during the warranty period remedial work is required in the ancillary pavement and the contractor agrees with the need for remedial work, the contractor will remedy the distress. Remedial work shall be performed according to section C.5. if the contractor does not agree with the need for remedial work or the type of remedial work requested, written notification of the dispute will be made to the engineer. The Conflict Resolution Process will resolve the dispute.

C.3.3 Warranted Mainline and Ancillary HMA Pavement Evaluation, Third Year

- (1) In the third year of the warranty period, a region and a contractor representative will, together, review and evaluate the performance of the warranted mainline and ancillary HMA pavement. All warranted pavement will be evaluated for performance in regards to its intended purpose.
- (2) If both the department representative and the contractor representative agree on the pavement's performance and remedial work is required, the contractor will remedy the distress. If the two evaluators are not in agreement on the need for or type of remedial work, the Conflict Resolution Process will resolve the dispute.
- (3) Upon completion of the required remedial work, the contractor and department will complete form DT2305 to confirm completion of the warranty and all work required by this specification

C.3.4 Contractor Monitoring

(1) During the warranty period, the contractor may monitor the pavement using nondestructive procedures. Coring, milling, or other destructive procedures may not be performed by the contractor without approval of the engineer in accordance to the permit requirements of section C.5.

C.4 Table of Distress Types, Threshold Levels and Remedial Action

(1) The department will include each of the distress types listed below in the mainline pavement surveys. The distress thresholds of low (L), medium (M) or high (H) refer to the department's latest Pavement Distress Survey Procedures Manual which references to ASTM D6433-07, Standard Practice for Road and Parking Lots Pavement Condition Index Surveys, Appendix X1. *Distress in Asphalt Pavements*. The table lists the remedial action required for each distress type when the corresponding threshold level criterion is met.

Distress Types	Threshold Levels	Remedial Actions ^[1]
Alligator Cracking ^[2]	≥ 50 square feet in a segment of level medium (M) or higher.	Remove and replace the distressed layer(s) of the warranted pavement the full lane width by the length of the distress. The extent of the repair limits will be determined by the contractor and the engineer.
Bleeding	≥ 50 square feet in a segment of level medium (M) or higher.	Remove and replace the distressed layer(s) of the warranted pavement the full lane width by the length of the distress. The extent of the repair limits will be determined by the contractor and the engineer.
Reflective Longitudinal Cracking ^[3]	≥150 linear feet for cracks that are level medium (M) or higher.	Seal the cracks following meeting the requirements listed in section C.5.3.
Non-Reflective Longitudinal Cracking ^[3]	\geq 125 linear feet in a segment.	Level low (L): Seal the cracks following the requirements listed in C.5.3.
		Level medium (M) or higher: Remove and replace the distressed layer(s) of warranted pavement the full lane width in the distressed areas. The extent of the repair limits will be determined by the contractor and the engineer.

Distress Types	Threshold Levels	Remedial Actions ^[1]
Rutting ^{[2],[4]}	\geq 0.25 inches in depth and <0.5 inches in depth.	Remove ruts by overlaying or micro surfacing the rut depth and then place a full lane width micro surface. The extent of the repair limits will be determined by the contractor and the engineer.
	≥ 0.5 inches in depth.	Remove and replace upper layer. The extent of the repair limits will be determined by the contractor and the engineer.
Surface Weathering and Raveling (includes Segregation)	≥ 50 square feet in a segment of level medium (M) or higher.	Remove and replace the distressed layer(s) of the warranted pavement the full lane width by the length of the distress. The extent of the repair limits will be determined by the contractor and the engineer.
Potholes, patching, slippage areas, and other disintegrated areas.	Any presence of this type of distress.	Remove and replace the distressed layer(s) of the warranted pavement the full lane width by the length of the distress. The extent of the repair limits will be determined by the contractor and the engineer.

^[1] No remedial action shall be taken that changes the lines and grades as constructed without the approval of the engineer.

^[2] The contractor will be relieved of the responsibility for remedial action for Alligator Cracking and Structural Rutting if:
1) the area in question is of proper thickness (not thinner than 0.50 inches from plan thickness as determined by coring) and
2) recovered asphalt meets or exceeds the Performance Grade (PG) of the Rolling Thin Film Oven (RTFO) aged binder that would have been specified in a non-warranted HMA mix in Chapter 14 of the FDM.

^[3] Shoulder line cracking is excluded from the segment measurements.

^[4] Rutting depth and length will be initially identified using standard WisDOT procedures. Rutting will be measured in 5.28' foot intervals, with a diagonal laser sweep measuring the high and low points of each wheel path. If rutting depth meets the threshold criterion, the final rut depth and length will be established by a method mutually agreed upon by the contractor and the department. Rutting will be considered to have met the threshold criteria if cumulatively 10% of the segment measurement are over the limit.

C.5 Warranty Work

- (1) During the warranty period, perform warranty work at no additional cost to the department. Warranty work consists of remedial work, elective/preventive maintenance and the required crack sealing operation. Maintain insurance for performing warranty work as specified in standard spec 107.26 throughout the warranty period.
- (2) During warranty work operations, traffic control will be as specified in standard spec 643 and all will conform to Part 6 of the Wisconsin Manual on Uniform Traffic Control Devices.
- (3) If warranty work necessitates a corrective action to the adjacent lane(s) or shoulders, or both, that additional corrective action will be the responsibility of the contractor.
- (4) If warranty work causes damage to, or removal of, the pavement markings, replacement of the pavement markings will be the responsibility of the contractor. Replace the pavement markings according to standard spec 646.1 through standard spec 646.3. Use replacement materials of the same kind specified in the original contract unless mutually agreed otherwise by the engineer and the contractor.
- ⁽⁵⁾ Pavement distresses that are the result of factors unrelated to the HMA Warranted paving operations and materials are not subject to remedial action under this special provision. The area defined by the length of the pavement repair and the width of the mainline traveled way and its adjacent mainline shoulder will be excluded from the warranty. Responsibility for these pavement distresses will be assessed under other contract provisions.
- (6) All warranty work including, but not limited to, remedial work, elective/preventive maintenance and the required crack sealing operation shall require a permit from the region. The region will provide contact information for obtaining a permit to the contractor.
- (7) Document all warranty work performed. Use the department's form DT2305 to annually provide this information to the region.

C.5.1 Remedial Work

- (1) Remedial work will be based on the results of the mainline pavement distress surveys or the ancillary pavement evaluations. Perform remedial work in the same calendar year that the threshold distresses were recorded, unless determined otherwise by the engineer. Remedial work to be performed and materials to be used will be the joint decision of the contractor and the engineer. The contractor will not be responsible for damages that result from coring, milling, or other destructive procedures conducted by the department.
- (2) For mainline pavement segments that meet the distress threshold level criterion of the table in section C.4, perform the remedial work prescribed in the remedial action column of the table. Perform the remedial work in all segments of the project where a threshold level is met. Apply the remedial work to the entire segment(s) and the adjacent lanes and HMA shoulders unless mutually agreed otherwise by the engineer and the contractor.
- (3) For distressed ancillary pavement and distressed mainline shoulders not adjacent to distressed mainline pavement, perform remedial work as mutually determined by the contractor and the engineer.
- (4) If, at any time during the warranty period, 30 percent of more of all of the full project segments require or have received remedial action per section C.4 of the specification, then perform remedial action on the entire project as mutually determined by the contractor and the engineer. If remedial action from a segment enters into an adjacent segment and is not due to the adjacent segment requiring remedial action on its own, the adjacent segment will not count as a segment requiring remedial action for the 30 percent criteria listed above.
- ⁽⁵⁾ The contractor will have the first option to perform the remedial work. If, in the opinion of the engineer, the problem requires immediate attention for the safety of the traveling public, and the contractor cannot perform the remedial work within eight hours, the engineer may have the remedial work performed by other forces and at the contractor's expense. Remedial work performed by other forces will not alter the requirements, responsibilities, or obligations of the warranty.

C.5.2 Elective/Preventive Maintenance

(1) Elective/preventive maintenance will be a contractor option. The contractor and the engineer will coordinate elective/preventive maintenance to be performed and materials to be used.

C.5.3 Required Crack Sealing Operation

(1) For a mainline plan thickness of 2.5 inches or less, perform the crack sealing operation in the second year of the warranty period. For a mainline plan thickness greater than 2.5 inches, perform the crack sealing operation in the third year of the warranty period. Rout and seal cracks in the mainline and ancillary pavement as follows:

Crack Width < 1/4-inch	Required Action(s) None
\geq 1/4-inch and <3/8-inch	1. Rout a uniform reservoir with a 1:1 width to depth ratio and a final width equal to the crack width plus 1/8-inch. Do this step as necessary.
	2. Clean with compressed air so that all vegetation, loose dirt and foreign material are removed.
	3. Seal with a rubberized crack filler such that it is placed flush to 1/8-inch below the pavement surface.
\geq 3/8-inch	1. Clean with compressed air so that all vegetation, loose dirt and foreign material are removed.
	2. Seal with a fiber reinforced rubberized crack filler such that it is placed flush to 1/8-inch maximum above the pavement surface.

(2) Perform the crack sealing operation when the air temperatures is 40° F or higher. Ensure that cracks are free of moisture prior to sealing. Allow sealant to cure before opening to traffic. Remove all routed debris from the road surface. Use a sealant material meeting the requirements of ASTM D6690 Type II; Joint and Crack Sealants, Hot Applied, for Asphalt and Concrete Pavements. Reseal any crack that has been previously sealed as part of elective maintenance or remedial work if the sealant has cracked, opened, debonded from the pavement, or new cracks have formed extending from or adjacent to the previously sealed crack.

D Measurement

- (1) The department will measure the Warranted HMA Pavement Overlay bid items by the ton, based on the quantity of mixture placed, completed and accepted. The contractor will present certified records of shipmen for the quantities placed under this special provision.
- (2) The department will measure Warranted HMA Pavement Overlay Mainline as specified above up to a maximum of 105% of the plan quantity.
- (3) The department will measure Warranted HMA Pavement Overlay Ancillary as specified above up to a maximum of 105% of the plan quantity, or the quantity mutually agreed upon by the contractor and engineer.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
495.0100.S	Warranted HMA Pavement Overlay Mainline	Ton
495.0200.S	Warranted HMA Pavement Overlay Ancillary	Ton

- (2) Payment is full compensation for furnishing, preparing, hauling, mixing, and placing all materials, including asphaltic materials; for compacting mixtures; for preparing the foundation unless otherwise provided; for the warranty bond(s) and warranty work; for providing the Quality Control Plan and required documentation; and for performing traffic control (except during the initial construction of the project).
- (3) Payment is also full compensation for furnishing all joints required between nightly paving operations, including sawing asphalt.

22. Seeding Mixture No. 30.

Conform to the requirements of standard spec 630 and as hereinafter specified.

Replace the 10% Birdsfoot Trefoil seed within the No. 30 seed mixture with 10% White Clover seed.

23. Traffic Control Type II Sign Covering.

This special provision describes covering new and existing Type II signs as required under standard spec 643.

Replace standard spec 643.3.8.1(1) *with the following:*

- (1) For new and existing signs, if a sign message is no longer relevant, promptly remove the sign or cover all, or if the engineer allows, part of the sign face with materials conforming to standard spec 643.2.9.5. Ensure that neither the reflectivity nor irrelevant messages are visible. Unless the engineer allows otherwise, use spacers between the sign and cover and attach at a minimum of four points per cover panel as follows:
 - For aluminum signs: use 3/16 inch diameter aluminum rivets or aluminum self-tapping screws.
 - For plywood signs: use 3/16 inch diameter wood screws.

Replace standard spec 643.5.2 with the following:

(1) Payment for the Traffic Control bid items is full compensation for constructing, assembling, painting, hauling, erecting, re-erecting, maintaining, restoring, and removing traffic signs, drums, barricades, and similar control devices, including arrow boards, unless provided otherwise; for providing, placing, and maintaining lights, including the fuel or power unless provided otherwise; partially or fully covering or uncovering signs; and for providing, applying, and removing pavement markings, unless provided otherwise. If Traffic Control is not specified, but is later found necessary and is required, the department will pay for this work as extra work.

(2) Payment for the Traffic Control Detour bid items is full compensation for supplying and performing all flagging and guidance services; and for providing, installing, reviewing, maintaining, and removing signs associated with guidance services. If the bid item Traffic Control Detour is not specified, but is later found necessary and is required, the department will pay for this work as extra work.

Replace standard spec 643.5.3 with the following:

(1) Payment for the Traffic Control Surveillance and Maintenance bid items is full compensation for providing all labor, materials, tools, equipment, vehicles, and incidentals, including reports and telephone charges, necessary to complete the work; and for partially or fully covering or uncovering signs. The department will not pay for replaced traffic control signs or devices under this bid item; replacement is incidental to the respective contract bid item or items.

24. Pavement Marking Wet Reflective Tape 8-Inch, Item 646.0873.S.

A Description

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

B Materials

Furnish wet reflective pavement marking tape if required, from the department's approved products list.

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

C Construction

C.1 Inlaying Tape into New Asphaltic Pavement

Inlay the material into the fresh asphalt mat at temperatures between 130 and 180 degrees Fahrenheit for a coarse mix and at temperatures between 130 and 160 degrees Fahrenheit for a fine mix. Place the tape per manufacturer's recommendations as close behind the asphalt paver as soon as compacting steps are completed and temperature permits and according to the plan details. If necessary, supply a dedicated asphalt roller to the striping operation for proper inlay application.

D Measurement

The department will measure Pavement Marking Wet Reflective Tape (Width) in length by the linear foot of tape placed according to the contract and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
646.0873.S	Pavement Marking Wet Reflective Tape 8-Inch	LF

Payment is full compensation for cleaning and preparing the pavement surface; including heating as required by the manufacturer; and for furnishing and installing the material. 646-017 (20100709)

25. Pavement Marking Grooved Wet Reflective Tape 4-Inch, Item 646.0881.S.

A Description

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

B Materials

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

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

C Construction

C.1 General

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

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

C.2 Groove Depth

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

C.3 Groove Width – Longitudinal Markings

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

C.4 Groove Position

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

C.5 Groove Cleaning

C.5.1 Concrete

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

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

C.5.2 New Asphalt

Groove pavement 10 or more days after paving.

Use a high-pressure air blower with at least 185 ft^3 /min air flow and 120 psi air pressure to clean the groove.

C.5.3 Existing Asphalt

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

Use a high-pressure air blower with at least 185 ft³/min air flow and 120 psi air pressure to clean the groove.

C.6 Tape Application

Apply the wet reflective pavement marking tape when both the air and surface temperature are 40 degrees F and rising.

Application of the tape in the groove without additional surface preparation adhesive will be as follows due to Volatile Organic Compound Limitations:

- 1. May 1 to September 30, both dates inclusive the Southeast Region and the ozone non-attainment or maintenance Northeast Region counties of Sheboygan, Manitowoc, Kewaunee, and Door.
- 2. June 1 to August 31 the Southwest Region, and the Northeast, North Central, and Northwest Regions except for the ozone non-attainment or maintenance Northeast Region counties of Sheboygan, Manitowoc, Kewaunee, and Door.

Application of the tape in the groove with additional surface preparation adhesive will be as follows due to Volatile Organic Compound Limitations:

- 1. October 1 to April 30, both dates inclusive the Southeast Region and the ozone non-attainment or maintenance Northeast Region counties of Sheboygan, Manitowoc, Kewaunee, and Door.
- September 1 to May 31, both dates inclusive the Southwest Region, and the Northeast, North Central, and Northwest Regions except for the ozone nonattainment or maintenance Northeast Region counties of Sheboygan, Manitowoc, Kewaunee, and Door.

The surface preparation adhesive must be set (feels tacky but is no longer in liquid form) and have a matte finish rather than a glossy wet appearance. Refer to the manufacturer's instructions for determining when the surface preparation adhesive is set.

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
646.0881.S	Pavement Marking Grooved Wet Reflective Tape 4-Inch	LF

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

646-018 (20100709)

26. Install Pole Mounted Cabinet, Item 673.0225.S.

A Description

This special provision describes installing department furnished aluminum enclosures on poles for intelligent transportation systems equipment.

B Materials

Use stainless steel bolts, nuts, and washers unless otherwise specified.

All conductors, terminals, and parts that could be hazardous to maintenance personnel shall be protected with suitable insulating material.

The cabinet will be equipped with service panels. Two panels shall be provided and mounted on the cabinet sidewalls. The left side panel shall be designated as "Input/Communications," and the right side panel shall be designated as the "Service Panel."

The service panel will be equipped with a four-outlet handi-box. Wire the handi-box to the series portion of the filtering surge protector.

Use metallic conduit, fittings, and adapters required from the underground conduit transition point to the cabinet as part of this item. A typical installation requires on 2-inch conduit. Use metallic conduit according to standard spec 652.

C Construction

Fasten the field cabinet securely onto a pole. Provide bolted stainless steel connections with lock washers, locking nuts, or other engineer-approved means to prevent the connection nuts from backing off. Isolate dissimilar materials from one another using stainless steel fittings. Make all power connections to the cabinet as specified in standard spec 656.

Drill and tap the cabinet, as necessary, to mount the terminal blocks and other attachments to the service panel, to provide an entrance on the back of the cabinet for cable from the pole mounted intelligent transportation systems equipment, and to mount the service panel to the cabinet as shown in the details. Remove all sharp edges or burrs, or both, caused by the cutting or drilling process. Seal all openings to prevent water from entering the cabinet. Mount the surge protector to the service panel.

Install metallic conduit on the exterior of the pole (for entrance to the cabinet from the ground) as shown in the plans, and according to the applicable requirements of standard spec 652.

D Measurement

The department will measure Install Pole Mounted Cabinet as each individual assembly, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
673.0225.S	Install Pole Mounted Cabinet	Each

Payment is full compensation for installing the pole mounted cabinet; for making all connections and conduit/wire entrances; and for furnishing all testing. 673-010 (20100630)

27. Portable Changeable Message Sign, Item SPV.0045.01.

A Description

This special provision describes furnishing, maintaining installing, and operating six portable changeable message signs and operating manual as hereinafter provided.

A.1 General

During the life of this contract, provide 24 hour-a-day availability of equipment and forces to promptly restore or revise the Portable Changeable Message Signs. Provide the engineer with the name of the local individual, and one alternative contact, responsible for the maintenance and operation of the message signs.

Upon verbal notification of a required sign message modification, complete the message revision within 5 minutes, except during non-working hours complete the message revision within 15 minutes. Upon verbal notification of a required sign modification involving moving, replacing or adding a message sign, complete the sign modification within 1 hour.

The department reserves the right to coordinate all message sign revisions with the contractor based on actual traffic conditions. During non-working hours, respond to message sign requests as deemed necessary by the State Patrol.

Program a master list of predetermined messages, provided by the department, into the message sign software. A unique identification number shall be assigned to each predetermined message. The numbering system for the pre-approved messages shall be consistent on all the portable changeable message signs. Submit any special messages not on the master list, for approval to Jeff Gustafson, the Changeable Message Sign Coordinator at the SW Region Madison office, (608) 516-6400 prior to displaying the message on any message sign.

Prior to delivery of the message signs to the project site, coordinate with Jeff Gustafson, the Changeable Message Sign Coordinator at the SW Region Madison office, (608) 516-6400 to allow at least ten working days for the inspection and approval of the Portable Changeable Message Signs.

Supply portable changeable message signs that utilize a consistent computer software technology to operate all the message signs.

Maintain and make all repairs on the message signs delivered to the project. Ensure that the message signs remain operational throughout the duration of the project. Wash the face of the message sign a minimum of once per month or as directed by the engineer.

Provide the department an operating manual and instructions for the portable changeable message signs and base stations.

A.2 Pre-Approved Manufacturers

To become pre-approved as a qualified vendor of Portable Changeable Message Signs, the vendor must initially submit the unit specifications to the department. If the department approves the specifications, the vendor may arrange a message sign demonstration with the department at which the operation and features of the unit shall be demonstrated. All demonstrations shall be coordinated with Jeff Gustafson, the Changeable Message Sign Coordinator at the SW Region Madison office, (608) 516-6400.

The department has previously approved the following manufacturers:

- a. ADDCO Incorporated
- b. American Electronic Sign Company
- c. American Signal Company
- d. Display Solutions Incorporated
- e. Precision Solar
- f. Work Area Protection
- g. Solar Tech

B Materials

Furnish equipment that one person can easily transport and operate without assistance.

Provide a complete Portable Changeable Message Sign and trailer that is painted highway safety orange, except the sign case, which shall be painted black. Each message sign shall have a unique identification number displayed on both sides of the trailer with lettering that has a minimum height of 6 inches. The message sign identification numbers shall be positioned on the trailer in such a manner to be visible to shoulder traffic. The identification numbers shall have a reflective coating visible during nighttime operations.

B.1 Sign Case

The sign shall be capable of displaying a minimum of three lines of message text per message frame. Each line shall consist of a minimum of eight characters, equally spaced a minimum of 3 inches and a maximum of $4 \frac{1}{2}$ inches apart. Characters shall be a minimum of 17 inches high and a minimum of 11 inches wide and be legible from a minimum of 850 feet during both day and night conditions. The maximum sign width shall be 11 feet 6 inches.

The sign display shall consist of either a continuous matrix of pixels or individual character modules consisting of smaller matrices of pixels. Each matrix forming a character shall consist of a minimum 35 pixels in a five horizontal pixel by seven vertical pixel arrangement. Each pixel shall consist of a high-intensity LED cluster. The LED lamps shall run at a minimum voltage to provide extended lamp life. Each pixel shall be either square in shape with a minimum of 2-inch sides or round in shape with a minimum 2-inch diameter. The driver board shall provide means for dimming the display. The entire message sign shall complete a message change within 100 milliseconds.

The circuit boards used in the sign case shall be constructed of components readily available from at least two other sources. A schematic of the circuit boards shall be provided to the engineer.

The sign housing shall be weatherproof and shall be constructed of aluminum. The front face shall be covered with either a one-piece, clear, non-glare, lexan panel, or individual one-piece, clear, non-glare, lexan panels.

B.2 Raise and Lower Mechanism

The message sign shall have a vertical mast assembly constructed of structural steel tubing. The message sign shall include a built-in electric powered hydraulic pump capable of fully raising the sign within one minute. Each message sign shall also be equipped with a readily accessible manual lifting device. The message sign shall be capable of rising and locking at various heights. The bottom of the message sign shall be able to rise to a minimum height of 7 feet 0 inches above the ground.

A means shall be provided to prevent tampering with the message sign when the sign is raised to any locked height. The message sign shall be capable of rotating 360 degrees atop the vertical mast assembly when raised to any locked height. The mast assembly shall have a mechanism for locking the message sign in place when it is extended. When extended, the message sign shall be capable of being locked at any display angle. A means shall be provided to prevent tampering with the display angle once the message sign angle is locked.

B.3 Controller

Sign operations shall be at the direction and control of a programmable microprocessor (controller). The controller shall be furnished with a full size 101 key keyboard. The controller keyboard shall contain standard alphanumeric keys. The keyboard shall be capable of being used for operation of the controller in creating, storing and displaying additional sign messages. The controller shall be capable of storing a minimum of 200 messages (frames). The sign shall be capable of displaying from one to six messages in sequence. A minimum of 150 messages shall be preprogrammed and installed by the manufacturer. The controller shall also have the capacity for storage, recall and display of a minimum of 50 operator created messages. The controller shall be able to recall from memory, preview, and display message sequences at least six frames long. The controller shall be capable of storing a minimum of 25 messages and user created by the operator using any combination of preprogrammed messages and user created messages.

The controller shall allow the operator to vary the message flash rate and sequence rate in 1/4-second intervals or less with the flash rate extending from zero seconds to at least four seconds. The controller shall also allow the operator to generate a moving or flashing arrow symbol that shall be capable of being displayed on any line of a message while text is displayed on other lines of the message. The controller shall also allow the operator to generate a larger moving or flashing arrow symbol that shall be capable of being displayed on the entire sign face, using all three lines. Either of these message

frames containing arrow symbols shall be capable of being included in a sequence. The controller shall allow the operator to flash (blink) selected lines of messages and include these messages within a message sequence.

The controller shall be equipped with a display screen for previewing the actual sign message prior to displaying the message on the sign. The controller shall be removable for ease of replacement, service, or programming.

Each controller shall be programmed with a password system that will deter unauthorized programming of the controller. The password system shall include at least two levels of security such that operators at one level may only change message sequences displayed using preprogrammed sequences and operators at a higher level may create and store messages or message sequences. Operators at the higher level shall also be capable of displaying message sequences.

A back up battery shall supply power to the controller when the message sign is not in operation.

The circuit boards used in the controller shall be constructed of components readily available from at least three other sources. Provide the engineer with a schematic of the circuit boards.

Ambient light controlled continuous dimming, with a minimum range of one hundred percent to forty percent shall be provided for the sign display. A means for manually controlled dimming shall also be provided.

The control panel shall have switches for raising and lowering the sign. Provide a night light for the control panel and controller screen and install it in the controller console cabinet.

The Portable Changeable Message Sign shall be fully equipped to receive commands to change standard messages and to allow monitoring of sign operations through a cellular telephone connection at the sign unit, without rewiring the cabinet connections. Provide a modem that operates at a minimum speed of 33.6K BAUD. The controller shall be capable of receiving commands via cellular telephone from a personal computer based remote station. The controller shall be furnished with a standard RS-232 interface such that a laptop personal computer may be connected with the controller to exchange data. The controller shall also be equipped to connect to a standard telephone landline for remote control operation.

The command protocol with which the controller communicates externally shall be of a standard format and be capable of being reconfigured. The command protocol with which the controller communicates via an RS-232 interface shall be a standard format and be capable of being reconfigured.

A cellular phone unit shall be provided and installed in the message sign by the manufacturer.

B.4 Power Source

The solar Portable Changeable Message Sign shall run on a battery system using a solar charging system. The solar-powered battery charging system shall consist of an array of high-efficiency, single-crystal silicon cells mounted on top of the sign panel and a voltage regulator to prevent overcharging of the battery system. The system shall use deep-cycle batteries and shall include a voltage meter, ammeter and an hour meter. The hour meter will be capable of indicating the cumulative time that the message sign has been operational and displaying messages.

The solar cells shall be capable of charging and maintaining the batteries at operational levels under all weather conditions experienced in Wisconsin. The solar array panel shall be capable of rotating 360 degrees atop the sign case and shall be capable of being locked in any position. The solar array panel shall either be tilted at an angle of 45 degrees relative to the horizon or shall be capable of tilting from 0 degrees to a minimum of 45 degrees and shall be capable of being locked in any position. A switch shall be provided to disconnect the solar power supply for safety during maintenance.

The batteries shall be housed in a waterproof, heavy-duty housing which is equipped with necessary hardware to be locked using a padlock or build in lock. The batteries shall be of a standard size and type and be available from at least three different manufacturers. The housing that contains the batteries shall be capable of accommodating batteries from at least three different manufacturers. The batteries shall provide adequate back up power for the Changeable Message Sign to operate at full operation for 20 days having ambient air temperatures of 20 degrees Fahrenheit without any sun exposure to the solar array. Certification of the message sign's ability to operate for a period of 20 days without exposure to sunlight, as stated above, shall be provided by an independent laboratory. A switch shall be supplied to disconnect the battery supply for safety during maintenance.

The sign shall also be equipped to receive and use external 110 volt alternating current as an alternate source of power.

The sign shall also be equipped with a charging device which operates on 110 volt alternating current and that is capable of charging the deep-cycle battery system within 24 hours. The charging device shall automatically shut off when battery system is fully charged to prevent overcharging.

The entire unit shall be equipped with an isolated ground circuit. The ground wires shall be connected to an isolated terminal block. The frame of the trailer shall not be a part of the ground system, except possibly for the alternating current charging and operating systems.

All external wiring shall be single length with no splices and shall be protected from weather and obstructions encountered during transport.
All break lines shall be protected from obstructions encountered during transport.

B.5 Trailer

The highway trailer shall have a maximum width of 8 feet 6 inches and shall be constructed of heavy-gauge, rectangular structural steel tubing, equipped with either screw-type or hydraulic leveling jacks, trailer tongue jack with wheel, fenders, surge brakes, trailer hitch coupling with safety chains and a rear bumper. The trailer shall have a straight axle and two 15-inch wheels and tires with a combined rated load capacity greater than the weight of the entire sign unit and trailer.

The trailer shall be equipped with standard highway brake lights, turn signals, and hazard lights and shall be wired into a round, six-prong connector. All wires shall be single lengths with no splices. Separate rustproof metal cabinets shall enclose the battery system and the controller console. The cabinets shall be equipped with the necessary hardware to be locked using a padlock or built in lock. Exterior metal surfaces shall be painted federal orange. The doors and lids of the cabinets shall be capable of being locked in the open position to prevent accidental closure.

The trailer shall include a 6,000 pound capacity surge brake actuator.

The trailer hitch coupling shall be Class III with a minimum capacity of 5,000 pounds and shall provide for hookup to a two-inch ball type hitch. The coupling shall be capable of being tightened to the ball type hitch by hand turning a wheel. Heavy-duty safety chains with safety type hooks shall be provided and be attached to the trailer for use with the coupling and hitch assembly.

The trailer shall be equipped with a means of preventing theft of the trailer.

The trailer shall be equipped with heavy-duty, walk-on type fenders. A walk-on deck, a minimum of 18 inches in width, shall be provided on the trailer along both sides of the sign case. The decks shall be installed so that they are in front of and adjacent to both sides of the sign case when the sign case is locked in the transport mode. The walk-on decks shall be equal in length to the trailer. Non-slip treads shall be provided on these decks and on all trailer locations where service or maintenance standing or climbing will be required.

The trailer shall contain at least four leveling jacks, as previously described, which will level the trailer on a 6:1 slope and support 5000 pounds each.

The trailer shall have storage space for the leveling jacks when the jacks are not in use. When the leveling jacks are stored within the trailer, the jacks shall not protrude beneath the frame of the trailer. The trailer and sign shall be capable of withstanding wind gusts of up to 80 miles per hour when in operation with the sign raised to maximum height and the leveling jacks extended. The trailer shall also be equipped with a tongue jack that has a wheel. The tongue jack shall have a capacity greater than the tongue weight of the trailer.

The trailer shall be capable of mounting or descending six-inch curb heights without the frame striking the curb.

The trailer shall be legal for use on Wisconsin roads in accordance to State of Wisconsin statutes.

C Construction

Initially place the message sign in accordance to the plans and as approved by the engineer. Provide the engineer with a written list of initial message sign locations.

Install the message signs a minimum 30 feet and a maximum 50 feet from the edge line of the existing travel lane. Install the message signs perpendicular to the travel lane and level the message sign. Install the message signs to provide a 900-foot line of sight to approaching vehicles as measured from the centerline of the roadway. Ensure that the installation of message signs does not impede emergency vehicle access along any existing shoulder within the project vicinity.

Have a representative familiar with the operation and repair of the message signs available at the project site on the day the signs are to become operational. The representative shall remain available until all message signs are operating satisfactorily. Provide training to the engineer, as required, on operating, adjusting, and controlling the portable changeable message signs.

D Measurement

The department will measure Portable Changeable Message Signs by the unit in use as directed by the engineer per day, acceptably completed.

Any day in which the changeable message boards are not working properly for more than two hours will result in one day being deducted from the quantity measured for payment, plus an additional \$500 that the contractor will be liable to the department. Improper operation of a Portable Changeable Message Sign shall include displaying an incorrect message or a message sign operating at an incorrect location. More than a single day deduction in payment can be assessed if multiple operational errors occur on the project involving different Portable Changeable Message Signs on the same calendar day.

E Payment

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

ITEM NUMBER	DESCRIPTIION	UNIT
SPV.0045.01	Portable Changeable Message Sign	Day

Payment is full compensation for furnishing, maintaining and installing the complete unit.

28. Ramp Closure Gates Hardwired 32-FT, Item SPV.0060.01; Ramp Closure Gates Arms Stockpile 32-FT, Item SPV.0060.02; Ramp Closure Gates Hardwired 26-FT, Item SPV.0060.03; Ramp Closure Gates Hardwired 24-FT, Item SPV.0060.04.

A Description

This special provision describes providing freeway on-ramp closure gates on type 5 steel luminaire poles, and furnishing and delivering spare gate arms.

B Materials

B.1 General

Provide five user manuals and a listing of vendors and contact information for each manufactured component including flasher electrical components.

The engineer may allow alternate components equal to the manufactured components this special provision specifies. The engineer may require modification of the plan details to accommodate alternates. If the contractor provides an alternate arm and/or mounting adaptor, the engineer will reject that alternate if the contractor cannot demonstrate, to the engineer's satisfaction, that the department can easily remove and replace the arms.

B.2 Components

Furnish one Poles Type 5-Steel designed to carry twin 15-foot luminaire arms and conforming to standard spec 657 and with dimensions for acceptable installation of the ramp gate hardware as shown on the detail. Ensure a contiguous pole by eliminating the hand hole near base of pole, thus allowing uninhibited mounting of the gate pivot assembly.

Furnish galvanized steel nuts and galvanized bolts conforming to ASTM A307 except where designated as high strength (HS) conform to ASTM A 325. For the ramp closure gate locking mechanism, furnish a handle nut to fit on a ³/₄" bolt (B&B Roadway Part Number 0605P0539 or approved equal).

Furnish grade A36 steel for the gate supports, gate pivot assembly, and associated hardware that is all galvanized after fabrication by either a mechanical or hot dip process. Grind welded connections, rough edges, and burrs smooth before galvanizing to ensure a finished appearance. Ensure that the galvanized coating conforms to ASTM A 153.

Provide aluminum/fiberglass gate arms of the nominal length the bid item indicates and conforming to plan dimensions. Cover gate arms on two sides with alternating red and white shop-applied stype SH reflective sheeting conforming to standard spec 637.2. Also provide a shear pin base that is the manufacturer's "permanent pivot" style.

Furnish a worm gear winch with a single line vertical lift capacity of 2000 lbs. Ensure that the winch has hardened steel gears, a hand grip, permanently lubricated bearings, a reinforced arc-welded reel assembly, and mounting plate. Ensure that the winch can be mounted to the winch mount plate shown on the construction details and the handgrip can

be operated without conflict with the pole or ramp gate assembly. Furnish a 2 inch outdoor rated, rot resistant strap for the connection between the work gear winch and the gate arm pivot assembly.

Furnish hardwire power system and connections conforming to the following:

1. Cabinet

Furnish cabinet assemblies, power wire terminal strips, and power supplies for the on-ramp closure gate systems.

The cabinet shall be the following dimensions: 9-inches wide, 15-inches high, and 5-inches deep.

Minimum wall thickness of the aluminum castings shall be 3/16-inch.

Cabinet body shall have a cast rain hood over the top of the door opening.

Door shall be manufactured to accept a Corbin No. 2 lock.

Hinges shall consist of 3/6-inch diameter pins in cast hinge bosses that allow door to swing no less than 180° when open.

Cabinet shall be capable of being field prepared for top, bottom, or rear mounting and wire entrance holes.

Set screws shall be stainless steel.

Assembly shall be water resistant by the door flange in full contact with and compressing a neoprene gasket held by an adhesive to a groove cast into the cabinet body.

The cabinets shall consist of a cabinet body, door, and latch cast from aluminum alloy 319 or approved equivalent, and a Corbin No. 2 lock. The cast shall be free of voids, pits, dents, molding sand, and excessive foundry grinding marks. All radii shall be smooth and intact. Exterior and interior surfaces shall be smooth and cosmetically acceptable, free of molding fins, cracks, and other blemishes.

The aluminum shall meet the following minimum requirements:

- Yield Strength 18 KSI
- Tensile Strength 27 KSI
- Brinell Hardness 70
- Elongation (% in 2") 2

The assembly shall have an alodine conversion coating to provide corrosion resistance and a proper base for paint adhesion.

Furnish a stainless steel or anodized steel mounting adapter plate to mount the cabinet to a pole with stainless steel banding straps.

2. Power Converter

Furnish the cabinet with a 120 VAC to 12 VDC power converter.

Furnish the cabinet with a 10 position terminal block for the 12 VDC power distribution. Power wire terminal strips 10 position feed-through terminal blocks UL recognized for No. 22 AWG wire through No. 16 AWG wire and UL rated for 15 Amps. The terminals shall be tin-plated brass with brass clips and clamps.

Furnish gate flasher assemblies conforming to the following:

- 1. A 2-conductor connector, rated 12 Volts at 5 Amps minimum.
- 2. A 2-Amp weather resistant in-line fuse and fuse holder.
- 3. Wiring harness made from 6-conductor 14 AWG stranded insulated control cable.
- 4. 12 V Flasher controller, capable of providing LED flashers with 5% to 100% duty cycle at a one-second pulse repetition rate.
- 5. A 4-conductor male/female electrical connector pair, 10 Amp capacity for each connection, weather resistant, and mounted to allow rapid gate arm replacement.
- 6. A 5-Amp mercury switch with less than 3 ohms "on" resistance and a 20 to 30 degree activation angle. Mount the switch on the gate arm to activate the flashers when the gate arm is lowered more than 45 degrees from vertical.
- 7. Furnish red LED flashers meeting the requirements of the MUTCD and/or AREMA standards for hue and brightness.

Power consumption	0.45Amp @ 10.5 V
Life expectancy	100,000 hrs.
Directionality	0-degree cone orthogonal to face of flasher
Compliance temperature	-40C to +70C

Furnish electrical wires with jackets conforming to the following color scheme throughout the ramp closure gate system:

- Hot = Black or Red
- Neutral = White
- Ground = Green

Furnish a 4-digit combination padlock (Master Lock Model 175DLH or approved equal) for the purpose of preventing unauthorized use of the ramp closure gate system.

C Construction

C.1 Ramp Closure Gates

Under the Ramp Closure Gates bid items, provide ramp closure gate at the locations the plans show. Apply corrosion protection material from the department's approved products list to the interface between the aluminum base and steel pole. The engineer may direct adjustment of the gate arm assembly to ensure the correct vertical and angular orientation of the completed closure gate.

Install cabinet with power supply, flasher controller, and other components. Connect the 120 VAC to 12 VDC power supply to the circuit breaker in the breaker disconnect box. Connect the 120 VAC to 12 VDC power supply to the 10-position terminal block and connect the 12 VDC components to the terminal block.

Connect the 12 VDC terminal strip to the wiring harness through the female side of a 2-terminal polarized electrical connector. Connect male side of this connector to the flasher controller and the female side of a weatherproof polarized 4-conductor electrical connector.

Attach the male side of the 4 conductor electrical connector, mercury switch, wiring harness and the three LED flasher units to the portion of the flasher assembly mounted on the breakaway portion of the gate arm. Adjust mercury switch so that as the gate arm is lowered to a maximum of 45 degrees from the vertical, the gate flasher assembly is energized, and the LEDs begin to flash. Ensure that when the gate arm is raised to a minimum of 15 degrees from vertical, the mercury switches the gate flasher assembly off.

C.2 Furnishing Gate Arms

(1) Under the Ramp Closure Gate Arms Stockpile bid items, furnish and deliver spare arms of the nominal length of the bid item indicated conforming to B.2(4) of this special provision. Deliver spare gate arms to:

Wisconsin Department of Transportation DTSD Southwest Region 3601 Pierstorff Street Madison, WI 53704

D Measurement

The department will measure the Ramp Closure Gates Hardwired (Length) as each individual installation, acceptably completed.

The department will measure the Ramp Closure Gate Arms Stockpile (Length) as each individual unit, acceptably furnished and delivered.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Ramp Closure Gates Hardwired 32-FT	Each
SPV.0060.02	Ramp Closure Gate Arms Stockpile 32-FT	Each
SPV.0060.03	Ramp Closure Gates Hardwired 26-FT	Each
SPV.0060.04	Ramp Closure Gates Hardwired 24-FT	Each

Payment for the Ramp Closure Gate Hardwired is full compensation for providing ramp closure gates including support poles, gate arm assemblies, guides and collars, gate arms, cabinets, wiring and power converters, and gate flashers.

Payment for the Ramp Closure Gate Arms Stockpile is full compensation for furnishing and delivering ramp closure gate arms.

29. Marker Post Flexible for Guardrail Terminal, Item SPV.0060.05.

A Description

This special provision describes furnishing and installing flexible marker posts at guardrail terminals, as shown on the plans and as herein provided.

B Materials

The post shall be manufactured specifically for use as a roadside marker from fiberglass, thermoplastic composition, or co-extruded polyethylene to either a curved or tubular shape. The marker post shall remain intact and securely anchored, and return to its original vertical orientation within an angle of 15 degrees after a series of ten (five cold weather and five hot weather in accordance to the National Transportation Product Evaluation Program) impacts by a typical passenger car or pickup truck traveling at 55 mph (88 km/h). The material shall not become brittle or soft and remain stable in temperatures from -20 degrees Fahrenheit to 110 degrees Fahrenheit (-29 degrees Celsius to 43 degrees Celsius) and not be affected by ultraviolet exposure. The post shall be colored yellow except the top 6-inches to 9-inches (150 to 225 mm) shall be high reflective solid yellow. Mounting hardware shall be galvanized.

Marker Post, Flexible, shall be Safe-Hit, Model SH248GP3—WB; Davidson Plastics, Model FG-500; or Carsonite International, Model CDS306601 (Survivor Post) or Model CFR407201 (Curve Flex), or equal. Provide a certificate of specification compliance for models and manufacturers not listed.

C Construction

Install flexible marker posts onto Post 1 of the energy absorbing terminal using two 1/2" by 2" lag bolts. The curved side of the curved post shall face in the direction of travel on the highway.

Install marker post in front of the object being marked as referenced from the direction of travel by the approaching highway traffic.

D Measurement

The department will measure Marker Posts Flexible for Guardrail Terminal by each individual marker post 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.0060.05	Marker Post Flexible For Guardrail Terminal	Each

Payment is full compensation for furnishing and installing the posts.

30. Install Spread Spectrum Radio, Item SPV.0060.06.

A Description

This special provision describes installing a department-furnished 900 MHz serial or contact closure communications spread spectrum radio. The department will also furnish set-up software for the radio and a lightning protector for the antenna connection.

B Materials

Spread-spectrum radios and surge protectors as furnished by the department, and coaxial cable and connectors, and metallic conduit as supplied by the contractor.

Furnish ¹/₂-inch foam dielectric 50-Ohm coaxial cable meeting the following minimum requirements:

- 50 Ohms impedance (plus / minus 1 Ohm)
- Intended for a range of frequencies including 900 MHz
- Velocity of 88%
- Peak power rating of 40 kW
- DC resistance of 0.45 Ohms / 1000 feet for the inner conductor
- DC resistance of 0.58 Ohms / 1000 feet for the outer conductor
- DC breakdown of 4000 volts
- Jacket Spark of 8000 volts RMS
- Capacitance of 23.1 pF / foot
- Inductance of 0.058 μ H / foot
- Copper outer conductor
- Copper-Clad Aluminum inner conductor
- Diameter over jacket 0.63 inches (nominal)
- Diameter over Copper Outer Conductor of 0.55 inches (nominal)
- Diameter of inner conductor of 0.189 inches (nominal)
- Minimum bending radius of 5-inches
- Attenuation of 2dB / 1000 feet (nominal) at 900 MHz
- Average power of 1.10 (nominal) at 900 MHz

Furnish cable connectors to fit between the coaxial cable and the state-furnished spread spectrum radio.

C Construction

Bond the surge protector to the cabinet grounding system.

Use the manufacturer's set-up software to configure the radio for its intended use.

Following installation of the radio, antenna, and cable, aim the antenna at the matching antenna, as shown on the plans. Use the signal strength indicator on the radio to find the optimum position of the antenna. Also perform a frequency analysis to determine the optimal hop pattern of the radios, and test the continuity of every link by polling the radios using the software provided by the manufacturer. The position of the antenna and the hop pattern shall be adjusted until the polls show at least 200 consecutive polling intervals have been successfully transmitted and received. Demonstrate to the engineer that the hop pattern selected corresponds to the optimal noise free frequencies identified in the frequency analysis. Deliver 3 copies of the final test results for signal strength, frequency analysis, and test polling.

Following the installation of the spread spectrum radio assembly, antennas, and cables, perform the following tests:

- V.S.W.R test from the connection at the radio, with a fully configured antenna system (antenna, cable, and all connections). The V.S.W.R. shall not exceed 1.5:1 at 900 MHz.
- Bit error rate test. Test at 5600 bps from the radio to the matching radio shown on the block diagram in the plans. Test for 4 hours at a 2048 bit pattern. The contractor shall provide a hard copy output of results of each test to the engineer. The maximum error rate shall be 1 erroneous bit every 1 million bits.

D Measurement

The department will measure Install Spread Spectrum Radio as each individual installed unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.06	Install Spread Spectrum Radio	Each

Payment is full compensation for installing, setting up, configuring, and testing the spread spectrum radio, surge protector, cables, and connections; and for testing.

31. Install Cabinet Mount Yagi Antenna, Item SPV.0060.07.

A Description

This special provision describes installing a department-furnished Yagi spread spectrum radio antenna, and furnish and installing coaxial antenna cable, and metallic conduit on a new or existing cabinet as shown on the plan.

B Materials

The antenna will be a Cushcraft PC9013N. It has a pigtail for connection to the antenna cable. Provide metallic conduit and stainless steel u-bolts for mounting to a new or existing cabinet as shown on the plans.

Furnish ¹/₂-inch foam dielectric 50-Ohm coaxial cable meeting the following minimum requirements:

- 50 Ohms impedance (plus / minus 1 Ohm)
- Intended for a range of frequencies including 900 MHz
- Velocity of 88%
- Peak power rating of 40 kW
- DC resistance of 0.45 Ohms / 1000 feet for the inner conductor
- DC resistance of 0.58 Ohms / 1000 feet for the outer conductor
- DC breakdown of 4000 volts
- Jacket Spark of 8000 volts RMS
- Capacitance of 23.1 pF / foot
- Inductance of 0.058 μ H / foot
- Copper outer conductor
- Copper-Clad Aluminum inner conductor
- Diameter over jacket 0.63 inches (nominal)
- Diameter over Copper Outer Conductor of 0.55 inches (nominal)
- Diameter of inner conductor of 0.189 inches (nominal)
- Minimum bending radius of 5-inches
- Attenuation of 2dB / 1000 feet (nominal) at 900 MHz
- Average power of 1.10 (nominal) at 900 MHz

C Construction

Mount the metallic conduit to the new or existing cabinet with u-bolts.

Install the antenna cable in the metallic conduit to the antenna.

Connect the antenna drop cable to the antenna. The connection shall be fully sealed using methods and materials recommended by the radio manufacturer.

Aim the antenna at the matching antenna, as shown in the plans. Use the signal strength indicator on the radio to find the optimum position.

D Measurement

The department will measure Install Cabinet Mount Yagi Antenna as each individual installed unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.07	Install Cabinet Mount Yagi Antenna	Each

Payment is full compensation for testing and installing the antenna and connections; and for furnishing all labor, tools, metallic conduit, mounting hardware, equipment, transportation, and incidentals necessary to complete the work.

32. Install Pole Mount Yagi Antenna, Item SPV.0060.08.

A Description

This special provision describes installing a department-furnished Yagi spread spectrum radio antenna, and furnish and installing coaxial antenna cable, and metallic conduit on a new or existing pole as shown on the plan.

B Materials

The antenna will be a Cushcraft PC9013N. It has a pigtail for connection to the antenna cable. Provide stainless steel bands for mounting to a steel pole or sign structure. Provide 2" metallic conduit as required in standard spec 652 to house antenna cable.

Furnish ¹/₂-inch foam dielectric 50-Ohm coaxial cable meeting the following minimum requirements:

- 50 Ohms impedance (plus / minus 1 Ohm)
- Intended for a range of frequencies including 900 MHz
- Velocity of 88%
- Peak power rating of 40 kW
- DC resistance of 0.45 Ohms / 1000 feet for the inner conductor
- DC resistance of 0.58 Ohms / 1000 feet for the outer conductor
- DC breakdown of 4000 volts
- Jacket Spark of 8000 volts RMS
- Capacitance of 23.1 pF / foot
- Inductance of 0.058 μ H / foot
- Copper outer conductor
- Copper-Clad Aluminum inner conductor
- Diameter over jacket 0.63 inches (nominal)

- Diameter over Copper Outer Conductor of 0.55 inches (nominal)
- Diameter of inner conductor of 0.189 inches (nominal)
- Minimum bending radius of 5-inches
- Attenuation of 2dB / 1000 feet (nominal) at 900 MHz
- Average power of 1.10 (nominal) at 900 MHz

C Construction

Mount the metallic conduit to the new or existing pole with stainless steel banding straps as shown on the plans.

Install the antenna cable in the metallic conduit to the antenna.

Connect the antenna drop cable to the antenna. The connection shall be fully sealed using methods and materials recommended by the radio manufacturer. Install the antenna so that it does not block the view of any microwave detector on the same pole.

Aim the antenna at the matching antenna, as shown in the plans. Use the signal strength indicator on the radio to find the optimum position.

D Measurement

The department will measure Install Pole Mount Yagi Antenna as each individual installed unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.08	Install Pole Mount Yagi Antenna	Each

Payment is full compensation for testing and installing the antenna and connections; and for furnishing all labor, tools, metallic conduit, mounting hardware, equipment, transportation, and incidentals necessary to complete the work.

33. Install Ground Mount Dynamic Message Sign, Item SPV.0060.09.

A Description

This special provision describes installing a department-furnished dynamic message sign and controller on structural steel sign supports (paid for separately), and integrating the sign and making it functional in the existing system.

B Materials

Materials will include department-furnished materials and contractor furnished materials.

Department-furnished materials include the following:

- One (1) Daktronics Vanguard Side Mounted Freeway Dynamic Message Sign (DMS). The DMS is 17' 1-3/16" long by 6' 3-19/32" tall by 1' 3/8" deep and weighs approximately 1100 pounds.
- One Daktronics Vanguard VFC-3000 DMS Controller.
- Control cable from DMS Controller to DMS.

Contractor furnished materials include the following:

• AWG #6 copper wire or equivalent bonding straps to bond the sign to the structural steel.

C Construction

Install the department-furnished sign controller in the pole mounted cabinet.

Connect the power and control cables in accordance to the manufacturer's recommendations.

Bond the bottom of the sign structure to one or more ground rods. Use exothermic welding at each end of the ground wire (unless the steel structure has a suitable grounding lug). Use an AWG # 6 solid, bare copper wire to bond the sign structure to the ground rod(s). Use a device that measures resistance to ground using the three-point fall-of-potential method to ensure that the resistance from the sign's ground bar to ground does not exceed 4 ohms. Add more ground rods if necessary to achieve this requirement.

D Measurement

The department will measure Install Ground Mount Dynamic Message Sign as each individual installed unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.09	Install Ground Mount Dynamic Message Sign	Each

Payment is full compensation for installation of the sign and controller; fabrication and installation of all mounting hardware; furnishing and installation of control and power cables; and for testing the sign and controller.

34. Install Terminal Server, Item SPV.0060.10.

A Description

This special provision describes installing terminal server and providing all necessary associated wiring.

B Materials

The department will furnish the terminal server. Provide all necessary cables between the terminal server and Ethernet switch or other device.

C Construction

Install the terminal server in a new or existing field cabinet. Connect it to devices as shown on the plans, or as directed by the engineer.

D Measurement

The department will measure Install Terminal Server by each individual installed 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.0060.10	Install Terminal Server	Each

Payment is full compensation for installing a terminal server; furnishing all necessary incidental hardware; and making all necessary connections.

35. Ground Rod, Item SPV.0060.11.

A Description

This special provision describes installing a ground rod and ground wire.

B Materials

Ground rod shall be copper clad steel with cladding 13 mils thick. The minimum diameter is 5/8-inch and the minimum length is eight feet. Ground wire shall be AWG # 6 bare, solid copper.

C Construction

Use exothermic welding to connect the ground wire to the rod. Install the rod vertically, or as close to vertical as conditions permit. Select locations with moist soil, if available. Place the rod at least 6 feet from all other ground rods.

D Measurement

The department will measure Ground Rod by each individual ground rod, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.11	Ground Rod	Each

Payment is full compensation for installation of the ground rod and ground wire; and for welding and connections at both ends of the ground wire.

36. Grounding Pull Box, Item SPV.0060.12.

A Description

This special provision describes installing the equipment grounding conductors for the ramp gates.

Perform the work under this bid item according to the requirements in standard spec 655, and as herein provided.

B (Vacant)

C Construction

Strip only enough of the jacket from the equipment grounding conductor to ensure a secure bond with the lay in type lug in the pull box.

D Measurement

The department will measure Grounding Pull Box as each individual installation, 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.0060.12	Grounding Pull Box	Each

Payment is full compensation for furnishing and installing the grounding hardware; and for preparing the grounding conductor to insure a secure bond.

37. Removing HMA Pavement Tapered and Notched Longitudinal Joints Milling, Item SPV.0090.01.

A Description

This special provision describes removing Tapered and Notched Longitudinal Joints called for in the plans prior to paving the adjacent lane in order to create a vertical longitudinal joint.

B (Vacant)

C Construction

Remove the notched wedge longitudinal joint constructed according to standard spec 450.3.2.8 immediately prior to paving the adjacent lane. Provide a uniform milled surface that is reasonably plane, free of excessively large scarification marks, and has the grade

and transverse slope the plans show or the engineer directs. Do not damage the remaining pavement.

Use a self-propelled milling machine with depth, grade, and slope controls. Shroud the drum to prevent discharging loosened material onto adjacent work areas or live traffic lanes. Provide an engineer-approved dust control system.

Do not windrow or store material on the roadway.

D Measurement

The department will measure Removing HMA Pavement Tapered and Notched Longitudinal Joints Milling by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Removing HMA Pavement Tapered and Notched	LF
	Longitudinal Joints Milling	

Payment is full compensation for removing the pavement; and for properly disposing of all materials.

38. Concrete Curb and Gutter 4-Inch Sloped 36-Inch Type A Special, Item SPV.0090.02.

Construct curb and gutter as shown on the plans and according to standard spec 601.

39. Sawing Concrete Partial Sawcut, Item SPV.0090.03.

This item shall be in accordance to standard specification 690 for the item Sawing Concrete except for the following:

Saw to the depth shown on the plan or as the engineer directs.

40. Milling and Asphalt Fill Crack Treatment, Item SPV.0180.01.

A Description

This special provision describes removing concrete pavement at locations of existing cracks and subsequently filling with HMA pavement Type E-30, as shown on the plans.

B Materials

Furnish HMA pavement Type E-30 in accordance to the pertinent requirements of standard spec 460. Furnish tack coat in accordance to the pertinent requirements of standard spec 455.

C Construction

Remove existing concrete pavement by milling to the dimensions and depths shown on the plans and as directed by the engineer. Apply tack coat in accordance to standard spec 455. Fill the locations of removed pavement with HMA pavement Type E-30 in accordance to standard spec 460 and as shown on the plans.

D Measurement

The department will measure Milling and Asphalt Fill Crack Treatment 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.0180.01	Milling and Asphalt Fill Crack Treatment	SY

Payment is full compensation for removing concrete pavement; properly disposing of all waste materials; furnishing and applying tack coat; and for furnishing and constructing the HMA pavement.

41. Continuously Reinforced Concrete Pavement SHES Repair, Item SPV.0180.02.

A Description

This special provision describes repairing continuously reinforced concrete pavement. Conform to standard spec 416.

B Materials

Furnish SHES concrete conforming to standard spec 416.2.5.1 and 416.2.5.2, but using a non-chloride accelerator. Furnish tie bars and steel reinforcement conforming to standard spec 505.2.4 and 505.2.6.

C Construction

Construct as specified in standard spec 416.3.8. Use extreme care when removing concrete at the ends of the repair between the full depth and partial depth saw cuts. Repair any damage to the existing reinforcing steel or concrete that is to remain in place.

Reinforce the concrete as the plans specify. Keep reinforcement clean and free from rust scale, straight, and free from distortion. Store all reinforcement steel, received on the job, in engineer-approved storage and distribute only as needed for immediate placement.

Place the bar steel reinforcement after properly preparing the subgrade. Place the longitudinal bars on top of the transverse bars and firmly tie or fasten together at each intersection. Support the assembled bars on bar chairs at a depth the plans show. Bar chairs are subject to the engineer's approval. Use bar chairs sufficient in strength and number to hold the steel reinforcement in position during construction.

Splice longitudinal bars by lapping, as the plans show, and firmly tie or fasten together. Arrange splices as the plans show.

Protect all bar steel reinforcement left protruding from the slab for any extended period from deterioration caused by exposure.

Do not bend bar steel reinforcement or subject to loading or forces that distort the steel or weaken the bond to the concrete.

Tie coated bars using a procedure, equipment, and materials that do not damage or cut the coating. Use one or more of the following materials to tie coated bars:

- Engineer-approved plastic or nonmetallic material.
- Stainless steel wire.
- Nylon, epoxy, or plastic-coated wire.

D Measurement

The department will measure Continuously Reinforced Concrete Pavement SHES Repair 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.0180.02	Continuously Reinforced Concrete Pavement SHES	SY
	Repair	

Payment is full compensation for removing the existing concrete and properly disposing of removed materials; for preparing the foundation; and for furnishing, hauling, preparing, placing, curing, protecting concrete, and repairing damages. Payment includes providing tie bars in unhardened concrete and all reinforcing steel within the repair as shown in SDD *Continuously Reinforced Concrete Pavement Repair and Replacement,* except that for tie bars provided in concrete not placed under the contract, the department will pay separately under the Drilled Tie Bars bid item as specified in standard spec 416.5. The department will pay separately for sawing existing concrete for removal under the bid items Sawing Concrete and Sawing Concrete Partial Sawcut.

ADDITIONAL SPECIAL PROVISION 1 (ASP 1) FOR TRANSPORTATION ALLIANCE FOR NEW SOLUTIONS (TrANS) PROGRAM EMPLOYMENT PLACEMENTS AND APPRENTICESHIPS

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Section 5204(e) – Surface Transportation Workforce Development Training and Education, provides for 100 percent Federal funding if the core program funds are used for training, education, or workforce development purposes, including "pipeline" activities. The core programs includes: Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Highway Bridge Program (HBP), Interstate Maintenance (IM), National Highway System (NHS), and Surface Transportation Program (STP). These workforce development activities cover surface transportation workers, including OJT/SS programs for women and minorities as authorized in 23 U.S.C. §140(b).

TrANS is an employment program originally established in 1995 in Southeastern Wisconsin. Currently TrANS has expanded to include TrANS program locations to serve contractors in Southeast (Milwaukee and surrounding counties), Southcentral (Dane County and surrounding counties including Rock County), and most Northeastern Wisconsin counties from locations in Keshena, Rhinelander and surrounding far Northern areas. TrANS attempts to meet contractor's needs in other geographic locations as possible. It is an industry driven plan of services to address the outreach, preparation, placement and retention of women, minorities and non-minorities as laborers and apprentices in the highway skilled trades. These candidate preparation and contractor coordination services are provided by community based organizations. For a list of the TrANS Coordinators contact the Disadvantaged Business Enterprise Office at (414) 438-4583 in Milwaukee or (608) 266-6961 in Madison. These services are provided to you at no cost.

I. BASIC CONCEPTS

Training reimbursements to employing contractors for new placements, rehires or promotions to apprentice of TrANS Program graduates will be made as follows:

1) **On-the-Job Training, Item ASP.1T0G, ASP 1 Graduate.** At the rate of \$5.00 per hour on federal aid projects when TrANS graduates are initially hired, or seasonally rehired, as unskilled laborers or the equivalent.

<u>Eligibility and Duration</u>: To the employing contractor, for up to 2000 hours from the point of initial hire as a TrANS program placement.

<u>Contract Goal</u>: To maintain the intent of the Equal Employment Opportunity program, it is a goal that 2 (*number*) TrANS Graduate(s) be utilized on this contract.

2) <u>On-the-Job Training, Item ASP.1T0A, ASP 1 Apprentice</u>. 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).

<u>Eligibility and Duration</u>: To the employing contractor, for the length of time the TrANS graduate is in apprentice status.

<u>Contract Goal:</u> To maintain the intent of the Equal Employment Opportunity program, it is a goal that <u>1</u> (*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).

<u>NOTE</u>: Unless using other advancement strategies, contractors are encouraged to use some or all of this monetary incentive to offset the cut in hourly wages an individual may incur when entering an apprenticeship if the full general laborer hourly rate has been previously paid. No special accounting measures are required.

II. IMPLEMENTATION

The implementation of ASP 1 is intended to cover only the amount of time it takes for underutilization to be resolved across the trades. This will be measured annually at the county and/or state levels using data administered by WisDWD in relation to goals set by the USDOL-

OFCCP. With appropriate state and federal approvals, we may also do some measurement at the company level.

It is the contractor's responsibility to note on their Certified Payrolls if their employee is a TrANS graduate or a TrANS apprentice. The District EEO Coordinators utilize the information on the Certified Payrolls to track the hours accumulated by TrANS Graduates and TrANS apprentices on WisDOT contracts. Payment under this ASP 1 is made based on the hours recorded off of the Certified Payrolls. Tracking may eventually include improved linkages with the WisDWD apprentice database, information from company and committee level sources.

TrANS is nondiscriminatory by regulation, and is a tool for optional use by contractors to address the underutilization of women and minorities as laborers and apprentices in our industry's skilled trades.

IV. TRANS TRAINING

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided to employees enrolled in apprenticeship and on-the-job training programs as follows:

The contractor shall provide on-the-job training aimed at developing full journey workers in the type of trade or job classifications involved. In the event the contractor subcontracts a portion of the contract work, the contractor shall determine how many, if any, of the trainees are to be trained by the subcontractor provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract.

Training and upgrading of minorities and women toward journey workers status is a primary objective of this training special provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority trainees and women trainees); to the extent such persons are available within a reasonable area of recruitment. The contractor will be given an opportunity and will be responsible for demonstrating the steps that they have taken in pursuance thereof, prior to determination as to whether the contractor is in compliance with this training special provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey workers status or in which they have been employed as a journey worker. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

V. APPRENTICESHIP TRAINING

The Federal Highway Administration's (FHWA) policy is to require full use of all available training and skill improvement opportunities to assure increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The FHWA On-the-Job Training (OJT) Program requires the State transportation agencies (STAs) to establish apprenticeships and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical under-representation of members of these groups in highway construction skilled crafts.

The OJT Supportive Services (OJT/SS) Program was established in Title 23 Code of Federal Regulations (CFR), Part 230) to supplement the OJT program and support STA training programs by providing services to highway construction contractors and assistance to highway construction apprentices and trainees. The primary objectives of OJT/SS are:

(1) To increase the overall effectiveness of the State highway agencies' approved training programs.

(2) To seek other ways to increase the training opportunities for women, minorities, and disadvantaged individuals.

The STAs are responsible for establishing procedures, subject to the availability of Surface Transportation and Bridge Funds under 23 U.S.C. §140(b) (Nondiscrimination), for the provision of supportive services with respect to training programs approved under 23 CFR, Part 230(a) (Equal Employment Opportunity on Federal and Federal-aid Construction Contracts – including Supportive Services).

The contractor and subcontractor shall maintain records to demonstrate compliance with these apprenticeship requirements. Reasonable exemptions and modifications to and from any or all of these requirements will be determined by the Wisconsin Department of Transportation-Civil Rights Office. A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT Civil Rights Office, 4802 Sheboygan Avenue, P.O. Box 7965, Rm. 451, Madison, WI 53707.

Effective with April 2005 Letting

ADDITIONAL SPECIAL PROVISION 3

Disadvantaged Business Enterprise Development. This item shall consist of concerted efforts by the contractor as part of its affirmative action responsibilities to train and develop minority business enterprises to become fully qualified contractors in the transportation construction field. Hereafter, minority business enterprise refers to businesses owned or controlled by socially and economically disadvantaged person(s) as certified by the Wisconsin Department of Transportation. It is the intention of this provision that firms owned and controlled by women be included as a presumptive group within the definition of Disadvantaged Business Enterprise (DBE).

The contractor will aggressively solicit DBE subcontractor and/or supplier quotes and incorporate them in its bid for work on this project by making systematic written and verbal contact with DBEs likely to have an interest in transportation construction work.

In this contract, the contractor shall procure services, materials, or subcontract the minimum percentage as shown on the cover of the Highway Work Proposal of the total amount bid to one or more certified DBEs. The Department maintains and furnishes the list of DBEs considered certified. If the proposed DBE is uncertified, the contractor must appeal to the Department to establish the eligibility of the DBE to become certified. This goal may be accomplished through the use of any combination of ethnic or women owned businesses certified as DBEs by the Department.

It is the intent of this specification that the percentage goal specified be fulfilled as indicated. However, if the contractor considers such fulfillment to be impossible of attainment, and if the contractor can demonstrate to the satisfaction of the Department that such utilization is not feasible, the Department may accept a varying percentage in lieu of the designated percentage for the DBE classification.

The contractor is encouraged to develop DBEs in areas of construction where these firms have traditionally been non-competitive. Therefore, the DBE goal on this contract may be reduced by the Department up to 50 percent for DBE work in the non-traditional construction categories of: concrete paving, asphalt paving, excavating and heavy grading, aggregate production, structures and major culvert installation. Any goal reduction is discretionary by the Department and will only be granted where it is clear the intended work will benefit the development and experience of the DBE.

Credit toward the required DBE goal is allowed for supplies and materials furnished by DBEs. However, the DBEs must assume the actual contractual responsibilities for furnishing the supplies and materials and also manufacture them. For these purposes, a manufacturer is a supplier that either produces goods from raw materials or substantially alters them before resale. When the supplier is not the manufacturer, only 60 percent of the expenditure to the supplier may be credited toward the DBE goal, provided the supplier performs a commercially useful function in the transaction.

Nevertheless, in order for the Department to execute a contract with a bidder that has failed to meet the specified DBE contract goal, the Department must determine that the bidder's good faith efforts were those that, given all relevant circumstances, a bidder activity and aggressively seeking to meet the goal would make.

Good faith efforts are to include contacts with the Department's Office of Disadvantaged Business Programs. In determining whether a contractor has made good faith efforts, the Department will usually look not only at the different kinds of efforts that the bidder has made, but also the quantity and intensity of those efforts. Efforts that are merely pro forma are not good faith efforts to meet the goal. Even if the efforts are sincerely motivated, they are not considered to be good faith efforts if, given all relevant circumstances, they could not

Effective with April 2005 Letting

Within ten working 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 subcontract or supply agreement and the dollar amount of such items of work. Failure by the contractor to furnish the necessary information within the specified time frame does not negate the Department's right to award and execute the contract; however, good faith efforts after the submittal requirement will be discounted. Delay in fulfilling this requirement shall not constitute a cause for extension of the contract time. All other aspects of this minority business enterprise requirement shall be in accordance with appropriate provisions of Part 26 of Volume 49 of the Code of Federal Regulations entitled "Participation by Minority Business Enterprises in Department of Transportation Programs."

The contractor shall also provide or arrange for direct assistance to the DBEs in such areas as providing information to prepare intelligent quotations, insuring that the DBE can read and understand highway plans, assisting in reaching a full understanding of the Standard Specifications and contract requirements applicable to the DBE portion of the work, appropriate cost accounting and other business practices, and other actions aimed at continued development of the DBE into a viable highway contracting business.

The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.

The work herein prescribed will not be paid for separately, but will be considered incidental to other items of work included in the contract.

Failure on the part of the bidder to meet the DBE goal and to meet an adequate level of good faith efforts will, at the discretion of the Department, be deemed failure to execute the contract, be just cause of the cancellation of the award, and such other actions as deemed appropriate.

The entire provisions of this item do not apply if the bidder, excluding joint ventures, is a certified DBE.

ADDITIONAL SPECIAL PROVISION 4

<u>Payment to all Subcontractors</u>. Within 10 calendar days of receipt by a contractor of a progress payment for work performed, materials furnished, or materials stockpiled by a subcontractor, the contractor shall pay that subcontractor for all work satisfactorily performed and for all materials furnished or stockpiled.

The contractor agrees further to release retainage amounts to each subcontractor within 10 calendar days after the subcontractor's work is satisfactorily completed. In addition, whenever the Department reduces the contract retainage amount, within 10 calendar days of receipt by a contractor of a retainage payment, the contractor must reduce the total amount retained from subcontractors to no more than remains retained by the Department.

The contractor shall pay the subcontractor within the time frames described above unless the contractor complies with both of the following within 10 calendar days of receiving the Department's progress payment:

- 1) The contractor notifies the subcontractor in writing that the work is not satisfactorily completed.
- 2) The contractor requests approval from the Department to delay payment because the subcontractor has not satisfactorily completed the work.

The contractor's request for approval should include the written notification to the subcontractor and shall provide sufficient documentation of good cause to assist the engineer in making a timely decision. If the engineer does not grant approval, the contractor shall pay the subcontractor within 10 calendar days of the Department's decision.

All subcontracting agreements made by a contractor shall include the above provisions and shall be binding on all contractors and subcontractors.

The contractor certifies compliance with the requirements of this Additional Special Provision by signing the contract. This clause applies to both DBE and non-DBE subcontractors.

ADDITIONAL SPECIAL PROVISION 6 MODIFICATIONS TO THE STANDARD SPECIFICATIONS

Make the following revisions to the 2012 edition of the standard specifications:

102.1 Prequalifying Bidders

Replace paragraph two with the following effective with the November 2011 letting:

(2) Furnish a dated prequalification statement on the department's form at least 10 business days before the time set for opening proposals.

106.1 General

Replace paragraph one with the following effective with the June 2012 letting:

⁽¹⁾ Provide materials conforming to the contract. Use new products and materials for items permanently incorporated into the work unless the contract specifies or allows otherwise. Use materials the contract specifies unless the engineer authorizes substitutes under 108.8. Monitor construction operations to identify potential nonconforming materials and prevent their incorporation into the work. Designate one person, either a member of the contractor's own organization or acting as an agent for the contractor, who will submit all contractor-generated materials information required under the contract to a person the engineer designates.

106.3.4.3.1 General

Replace paragraph two with the following effective with the November 2012 letting:

- (2) Required sampling and testing methodologies and documentation are specified in CMM chapter 8.
- ⁽³⁾ If disputed, approval of materials and components, as well as acceptance of the work incorporating those materials or components, is subject to review under the QMP dispute resolution process.

107.17.3 Railroad Insurance Requirements

Replace the entire text with the following effective with the August 2012 letting:

- ⁽¹⁾ If required by the special provisions, provide or arrange for a subcontractor to provide railroad protective liability insurance in addition to the types and limits of insurance required in 107.26. Keep railroad protective liability insurance coverage in force until completing all work, under or incidental to the contract, on the railroad right of way or premises of the railroad and until the department has accepted the work as specified in 105.11.2.4.
- (2) Provide railroad protective liability insurance coverage written as specified in 23 CFR part 646 subpart A. Provide a separate policy for each railroad owning tracks on the project. Ensure that the railroad protective liability insurance policies provide the following minimum limits of coverage:
 - 1. Coverage A, bodily injury liability and property damage liability; \$2 million per occurrence.
 - 2. Coverage B, physical damage to property liability; \$2 million per occurrence.
 - 3. An annual aggregate amount of \$6 million that shall apply separately to each policy renewal or extension.
- (3) Obtain coverage from insurance companies licensed to do business in Wisconsin that have an A.M. Best rating of A- or better. The cost of providing the required insurance coverage and limits is incidental to the contract. The department will make no additional or special payment for providing insurance.
- (4) Submit the following to each railroad owning tracks on the project as evidence of that railroad's respective coverage:
 - 1. A certificate of insurance for the types and limits of insurance specified in 107.26.
 - 2. The railroad protective liability insurance policy or other acceptable documentation to the railroad company.
- (5) Submit the following to the region as evidence of the required coverage:

- 1. A copy of the letter to the railroad company transmitting the submittal documents specified in 107.17.3(4).
- 2. A certificate of insurance for the required railroad protective liability coverages.
- (6) Do not begin work on the right of way or premises of the railroad company until the region receives the submittals specified in 107.17.3(5) and notification from the railroad company that the contractor has provided sufficient insurance information to begin work.
- (7) Notify the railroad and the region immediately upon cancellation or initiating cancellation, whichever is earlier, or any material change in coverage. Cease operations within 50 feet of the railroad right of way immediately if insurance is cancelled or reduced. Do not resume operations until the required coverage is in force.

107.26 Standard Insurance Requirements

Replace the entire text with the following effective with the November 2011 letting:

(1) Maintain the following types and limits of commercial insurance in force until completing and obtaining the department's acceptance of all work as specified in 105.11.2.4.

TYPE OF INSURANCE	MINIMUM LIMITS REQUIRED[1]
1. Commercial general liability insurance endorsed to include blanket contractual liability coverage. ^[2]	\$2 million combined single limits per occurrence with an annual aggregate limit of not less than \$4 million.
 Workers' compensation providing coverage regardless of the number of employees. 	Statutory limits
3. Employers' liability insurance.	Bodily injury by accident: \$100,000 each accident Bodily injury by disease: \$500,000 each accident \$100,000 each employee
 Commercial automobile liability insurance covering all contractor-owned, non-owned, and hired vehicles used in carrying out the contract.^[2] 	\$1 million-combined single limits per occurrence.

^[1] The contractor may satisfy these requirements through primary insurance coverage or through excess/umbrella policies.

- ^[2] The Wisconsin Department of Transportation, its officers, agents, and employees must be named as an additional insured under the general liability and automobile liability insurance.
- (2) For a joint venture, limited liability company, or partnership; ensure that the bidding entity is the named insured and that coverages apply jointly and severally to its member entities.
- (3) Obtain coverage from insurance companies licensed to do business in the state that have an A.M. Best rating of A- or better. The cost of providing the required insurance coverage and limits is incidental to the contract.
- (4) The department may request proof of insurance at any time. Submit copies of insurance policies as well as associated certificates of insurance upon department request.
- (5) Notify the department immediately upon cancellation or initiating cancellation, whichever is earlier, or any material change in coverage. Cease operations immediately if any insurance is cancelled or reduced. Do not resume operations until the required coverage is in force.
- (6) The above insurance requirements apply with equal force whether the contractor or a subcontractor, or anyone directly or indirectly employed by either, performs work under the project.

450.2.1 Acronyms and Definitions

Replace the entire text with the following effective with the November 2011 letting:				
(1) Interpret materials related acronyms used in sections 450 through 499 as follows:				
FRAP Fractioned reclaimed asphaltic pavement				
НМА	Hot mix asphalt			
JMF	Job mix formula			
PG	Performance graded			
RAP	Reclaimed asphaltic pavement			
RAS	Recycled asphalt shingles			
SMA	Stone matrix asphalt			
VMA	Voids in mineral aggregate			
WMA	Warm mix asphalt			
(2) Interpret materials related definitions us	ed in sections 450 through 499 as follows:			
Asphaltic binder	The principal asphaltic binding agent in HMA. including asphalt cement and material added to modify the original asphalt cement properties.			
Filler	A finely divided mineral aggregate added to asphaltic mixtures to improve mixture properties.			
Fractioned reclaimed asphaltic pavement	Material resulting from cold milling or crushing existing asphaltic pavement processed to control gradation properties.			
Leveling layer	Initial layer placed thinner than the minimum required under 460.3.2.			
Lower layer	Any asphaltic pavement layer that will not be exposed to traffic when the pavement structure is complete. A pavement structure may have multiple lower layers.			
Reclaimed asphaltic pavement	Material resulting from cold milling or crushing existing asphaltic pavement.			
Recycled asphalt shingles	Waste material from a shingle manufacturing facility, either new or used material salvaged from residential roofing operations, or any combination of these materials ground to ensure that 100 percent will pass a 1/2 sieve and processed to remove deleterious material.			
Upper layer	The asphaltic pavement layer exposed to traffic when the pavement structure is complete. A pavement structure has only one upper layer.			
Warm mix asphalt	Any asphaltic mixture that contains a warm mix additive, or utilizes a warm mix process, as part of its mixture design that has the ability to reduce the mixing and compaction temperature requirements below the typical temperatures used for that application.			

460.1 Description

Replace paragraph one with the following effective with the November 2011 letting:

(1) This section describes HMA mixture design, providing and maintaining a quality management program for HMA mixtures, and constructing HMA pavement. Unless specifically indicated otherwise, references within section 460 to HMA also apply to WMA.

460.2.1 General

Replace paragraph one with the following effective with the November 2011 letting:

(1) Furnish a homogeneous mixture of coarse aggregate, fine aggregate, mineral filler if required, SMA stabilizer if required, recycled material if used, warm mix asphalt additive or process if used, and asphaltic material.

460.2.4.4 Warm Mix Asphalt Additive or Process

Add a new subsection as follows effective with the November 2011 letting:

460.2.4.4 Warm Mix Asphalt Additive or Process

(1) Use additives or processes from the department's approved products list. Follow supplier or manufacturer recommendations for additives and processes when producing WMA mixtures.

460.2.8.2.1.5 Control Limits

Replace paragraph one with the following effective with the June 2012 letting:

(1) Conform to the following control limits for the JMF and warning limits based on a running average of the last 4 data points:

ic idst 4 data politis.		
ITEM	JMF LIMITS	WARNING LIMITS
Percent passing given sieve:		
37.5-mm	+/- 6.0	+/- 4.5
25.0-mm	+/- 6.0	+/- 4.5
19.0-mm	+/- 5.5	+/- 4.0
12.5-mm	+/- 5.5	+/- 4.0
9.5-mm	+/- 5.5	+/- 4.0
2.36-mm	+/- 5.0	+/- 4.0
75-µm	+/- 2.0	+/- 1.5
Asphaltic content in percent	+/- 0.4	+/- 0.3
Air voids in percent	+/- 1.3	+/- 1.0
VMA in percent ^[1]	- 0.5	- 0.2

^[1] VMA limits based on minimum requirement for mix design nominal maximum aggregate size in Table 460-1.

460.2.8.3.1.6 Acceptable Verification Parameters

Replace paragraph one with the following effective with the July 2012 letting:

(1) The engineer will provide test results to the contractor within 2 mixture-production days after obtaining the sample. The quality of the product is acceptably verified if it meets the following limits:

- Va is within a range of 2.7 to 5.3 percent.
- VMA is within minus 0.5 of the minimum requirement for the mix design nominal maximum aggregate size.

460.5.2.1 General

Replace paragraphs two and three with the following effective with the November 2011 letting:

- (2) Payment for HMA Pavement Type E-0.3, E-1, E-3, E-10, E-30, and E-30x is full compensation for providing HMA mixture designs; for preparing foundation; for furnishing, preparing, hauling, mixing, placing, and compacting mixture; for QMP testing and aggregate source testing; for warm mix asphalt additives or processes; and for all materials except asphaltic materials.
- (3) Payment for HMA Pavement Type SMA, is full compensation for providing HMA mixture designs; for preparing foundation; for furnishing, preparing, hauling, mixing, placing, and compacting the mixture; for QMP testing and aggregate source testing; for all materials including asphaltic materials and warm mix asphalt additives and processes; and for stabilizer, hydrated lime, and liquid antistripping agent if required.

506.3.22 Shop Inspection

Replace paragraph one with the following effective with the July 2010 letting:

⁽¹⁾ The engineer or an independent inspection agency under department contract may inspect all structural steel and miscellaneous metals furnished. The department will provide the contractor with monthly consultant inspection invoices and identify any quality deficiencies at the fabrication facility.

506.5 Payment

Add paragraph nine as follows effective with the June 2010 letting:

(9) The department will limit costs for inspections conducted under 506.3.2 to \$0.05 per pound of material and deduct costs in excess of that amount from payment due the contractor. The department will determine costs for in-house inspections based on hourly rates for department staff plus overhead and use invoiced costs for contracted-out inspections. The department will administer deductions for the contractor's share of the total inspection cost under the Excess Costs For Fabrication Shop Inspection administrative item.

614.2.5 Wood Posts and Offset Blocks

Retitle and replace the entire text with the following effective with the July 2012 letting:

614.2.5 Posts and Offset Blocks

614.2.5.1 Wood Posts and Offset Blocks

(1) Furnish sawed posts and offset blocks of one of the following species:

Douglas fir	Southern pine	Ponderosa pine	Jack pine	White pine
Red pine	Western hemlock	Western larch	Hem-fir	Oak

- (2) Ensure that posts are the size the plans show and conform to the nominal and minimum dimensions tabulated in 507.2.2.3. The contractor does not have to surface the posts. Provide posts of the net length the plans show after setting and cut off.
- (3) Use stress graded posts rated at 1200 psi f_b or higher. Determine the stress grade rating for douglas fir, western larch, and southern pine as specified in 507.2.2.4.
- (4) For hem-fir, hemlock, red pine, white pine, jack pine, ponderosa pine, and oak conform to the following:

SPECIES		WESTERN HEMLOCK, HEM-FIR, RED PINE, WHITE PINE, JACK PINE, PONDEROSA PINE		ОАК		
Μ	IAXIMUN	I SLOPE OF GRAIN	1 in	15	1 in 12	
1	OMINA	WIDTH OF FACE	6"	8"	6"	8"
SHA		GREEN	1"	1 3/8"	2 3/8"	3 1/8"
CHECKS, AND SPLITS		SEASONED	1 1/2"	2"	2 5/8"	3 1/2"
MAXIMUM WANE		1"	1 3/8"	1 1/8"	1 5/8"	
	>	MIDDLE 1/3 OF LENGTH	1 3/8"	1 5/8"	2 1/8"	2 3/8"
ABLE KNOTS NARROW FACE	END ^[1]	2 3/4"	3 1/4"	4 1/4"	4 3/4"	
	SUM IN MIDDLE 1/2 OF LENGTH ^[2]	11"	13"	17"	19	
LLOW/		EDGE KNOT N MIDDLE 1/3 OF LENGTH	1 3/8"	1 5/8"		
MAXIMUM ALLOWABLE KNOTS WIDE NARROV FACE FACE	EDGE KNOT AT END ^[1]	2 3/4" 7	3 1/4"			
	CENTERLINE	1 3/8"	1 7/8"	2 1/4"	2 7/8"	
	SUM IN MIDDLE 1/2 OF LENGTH	5 1/2"	7 1/2"	9"	11 1/2"	

TABLE 614-1 PROPERTIES FOR WOOD POSTS AND BLOCKS

^[1] But do not exceed the maximum allowable knot on the centerline of the wide face of the same piece.

^[2] But do not exceed 4 times the maximum allowable knot on the centerline of the wide face of the same piece.

⁽⁵⁾ Pressure treat posts and offset blocks as specified in 507.2.2.6. Use one of the oil-soluble preservatives or chromated copper arsenate conforming to 507.2.3. Use the same material for offset blocks and posts and treat material used in each continuous installation with the same type of preservative.

614.2.5.2 Steel Posts

(1) Furnish steel posts conforming to AASHTO M270 Grade 36 and galvanized according to AASTHO M111.

614.2.5.3 Plastic Offset Blocks

(1) Furnish plastic offset blocks from the department's approved products list.

614.3.1 General

Replace the entire text with the following effective with the July 2012 letting:

- (1) Paint the ends of cut-off galvanized posts, rail, bolts, cut or drilled surfaces of galvanized components, and areas of damaged zinc coating with 2 coats of zinc dust/zinc oxide paint. Clean the damaged and adjacent areas thoroughly before applying paint.
- (2) Apply 2 coats of wood preservative to cut surfaces of wood components. Use the same preservative originally used to treat that component or use a 2-percent solution of copper naphthenate conforming to AWPA Standard P8 or P36.

614.3.2.1 Installing Posts

Replace paragraph four with the following effective with the July 2012 letting:

 $\ensuremath{\scriptscriptstyle (4)}$ Cut post tops to the finished elevation the plans show.

628.2.13 Rock Bags

Replace paragraph one with the following effective with the November 2012 letting:

⁽¹⁾ Furnish rock bags made of a porous, ultraviolet resistant, high-density polyethylene or geotextile fabric that will retain 70% of its original strength after 500 hours of exposure according to ASTM D4355 and a minimum in-place filled size of 18-inches long by 12-inches wide by 6-inches high. Ensure that the fabric conforms to the following:

TEST REQUIREMENT	METHOD	VALUE
Minimum Tensile	ASTM D4632	
Machine direction		70 lb minimum
Cross direction		40 lb minimum
Elongation	ASTM D4632	
Machine direction		20% minimum
Cross direction		10 % min
Puncture	ASTM 4833	65 lbs minimum
Minimum Apparent Opening		0.0234 inches (No. 30 sieve)
Maximum Apparent Opening		0.0787 inches (No. 10 sieve)

637.3.3.1 General

Replace paragraph one with the following effective with the August 2012 letting:

(1) If erecting signs before their message becomes applicable, cover the sign faces conforming to 643.3.8.2 to make their messages unreadable during both daytime and nighttime. Maintain the covering in good condition until the message becomes applicable and the engineer orders the covering removed or until the contract expires.

638.3.1 General

Replace paragraph two with the following effective with the August 2012 letting:

(2) Do not display a sign before its message becomes applicable. If necessary cover the sign conforming to 643.3.8.2.

642.2.2.1 General

Replace the entire text with the following effective with the July 2012 letting:

- (1) Provide each field office with two rooms, separated by an interior door with a padlock. Ensure that each room has a separate exterior door and its own air conditioner.
- (2) Provide high-speed internet, fax, and voice with long distance communications services for exclusive department use that have the following:
 - A dynamic IP address (DHCP).
 - Ability to accommodate IPSec based VPN products.
 - A modem router with a capacity for 4 or more personal computers.
 - A connection speed of 3 Mbps or more with 4 computers operating simultaneously.
 - Two programmable touch-tone phones, one of which is cordless. Ensure that phone operations will not interfere with other telecommunications equipment.
 - Telephone voice mail service or a telephone answering machine.
- (3) Provide and maintain a plain-paper photocopier with fax capability that can accommodate both 8 1/2" x 11" and 11" x 17" paper. Replenish paper, toner cartridges, and other supplies before fully expended.

⁽⁴⁾ Equip with a drafting table with a drafter's stool. Except as specified in 642.2.2.4, provide 2 ergonomically correct office chairs in working condition with, at a minimum, the following:

1. Five-legged base with casters.

- 2. Seat adjustable from 15 inches to 22 inches from the floor with a seamless waterfall, rounded, front edge.
- 3. High backrest with no arms or adjustable arms.

643.2.9.1 General

Replace paragraph three with the following effective with the August 2012 letting:

- (3) Use the materials and methods specified in section 637, for type II signs, to manufacture and assemble signs. In addition, the contractor may use the following:
 - 1. For all signs, one or more of the following:
 - 1.1 An exterior grade B-B or better overlay plywood sign base 1/2-inch or thicker.
 - 1.2 For signs 24 inches or less wide, corrugated polypropolylene or polyethylene plastic sign base.
 - 1.2.1 Provide a base 0.4 inches thick with wall thickness of 0.035 inches and cell size of 0.4 inches.
 - 1.3 An aluminum/plastic laminate sign base.
 - 1.3.1 Provide an aluminum faced composite base 0.080 0.100 inches thick, with aluminum outer layers 0.010 - 0.020 inches thick surrounding a core of polyethylene or other thermoplastic material.
 - 2. For signs mounted on portable sign supports or barricades, in addition to the materials and methods specified above, the contractor may also use one or more of the following:
 - For signs wider than 24 inches, corrugated polypropolylene or polyethylene plastic sign base.
 - A retroreflective roll-up sign.
 - A sheet aluminum sign base 0.080 inches or thicker.

643.3.8 Signs

Replace the entire text with the following effective with the August 2012 letting:

643.3.8.1 General

- ⁽¹⁾ Install post-mounted temporary traffic control signs with the bottom of the sign 7 feet or higher above the top of curb or near edge of pavement. In rural areas with no view obstructions, the contractor may reduce the minimum mounting height to 5 feet. Mount associated secondary signs no lower than one foot below these minimums. Do not install signs on existing posts unless the plans show or the engineer or post owner allows.
- (2) Trim posts neatly with top of sign, so that no portion of the post protrudes above the sign.

643.3.8.2 Covering Signs

- (1) If a sign message is no longer relevant, promptly remove the sign or cover all or, if the engineer allows, part of the sign face with materials conforming to 643.2.9.5. Ensure that neither the reflectivity nor irrelevant messages are visible. Use spacers between the sign and cover and attach at a minimum of four points per cover panel as follows:
 - For aluminum signs: use 3/16 inch diameter aluminum rivets or aluminum self-tapping screws.
 - For plywood signs: use 3/16 inch diameter wood screws.
- (2) Repair or replace damaged signs as the engineer directs. Remove covers when no longer necessary.

643.3.8.3 Traffic Control Signs

(1) Under the Traffic Control Signs bid item, furnish, install, maintain, move, and remove temporary traffic signs including all posts and other sign supports.

643.3.8.4 Fixed Message Signs

- (1) Under the Traffic Control Signs Fixed Message bid item, furnish, install, and remove fixed message signs, including all posts.
- (2) If fastening a fixed message sign to an existing sign, completely cover the underlying sign message that is not applicable conforming to 643.3.8.2.
- ⁽³⁾ Install post-mounted fixed message signs at the height specified in 643.3.8.1. If the sign is larger than 50 square feet, install with the bottom of the sign at least 7 feet above the ground.

643.3.8.5 Sign Message Overlays

- (1) The contractor may overlay a direct-applied sheeting overlay by additional sheeting overlays, or by a demountable plaque. Do not overlay a demountable plaque overlay with another demountable plaque or by sheeting.
- (2) Use an overlay conforming to the sign message overlay specified in 643.2.9.4.
- (3) Non-word messages cannot be a sign overlay, except for the lane reduction transition sign, WO4-2.
- ⁽⁴⁾ Fasten the plaque overlay to the base sign with 4 bolts or screws, one in each corner of the plaque. Apply sheeting overlays so that no curling or lifting of the overlay occurs during the sign's usage. Promptly replace the sign if any part of the overlay curls of lifts.
- ⁽⁵⁾ Position the plaque or sheeting overlay on the base sign so that they appear to be an integral part of the message. Ensure that the plaque or sheeting overlay completely covers the underlying sign message that is no longer applicable. Do not overlay any other part of the base sign message, or let it extend beyond the base sign border.

643.3.8.6 Traffic Control Detour Signs

- (1) Under the Traffic Control Detour Signs bid item, furnish, erect, maintain, review, and remove M-series signs or signs the plans show, including all posts and other sign supports, on the designated detour or detours.
- (2) Erect signing at engineer-approved locations. Use engineer-approved mounting methods.
- (3) Cover all detour signs placed before the detour takes effect until needed.
- (4) If the detour signing occurs on a county or local road, coordinate with the local jurisdiction about placing the detour signing on existing posts.
- (5) Place all requested additional signing within 48 hours of the engineer's notification.
- (6) Immediately remove or cover signing when the detour is no longer in effect.

643.3.9 Traffic Control Detour

Replace paragraph two with the following effective with the August 2012 letting:

(2) Partially or fully cover any sign messages conflicting with detour traffic as the plans show or as the engineer directs conforming to 643.3.8.2.

643.4.4 Covering Signs

Add the following new subsection effective with the August 2012 letting:

643.4.4 Covering Signs

(1) The department will measure the Traffic Control Covering Signs bid items as each individual sign cover/uncover cycle acceptably completed, measured as the number of cover/uncover cycles for existing signs and for permanent signs provided under the contract. The department will not measure additional cover/uncover cycles as might be required to accommodate the contractor's operations.

643.5 Payment

Replace the entire text with the following effective with the August 2012 letting:

643.5.1 General

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

ITEM NUMBER	DESCRIPTION	<u>UNIT</u>
643.0100	Traffic Control (project)	EACH
643.0200	Traffic Control Surveillance and Maintenance (project)	DAY
643.0300	Traffic Control Drums	DAY
643.0400 - 0449	Traffic Control Barricades (type)	DAY
643.0450 - 0455	Traffic Control Barricades Permanent (type)	EACH

643.0500	Traffic Control Flexible Tubular Marker Posts	EACH
643.0600	Traffic Control Flexible Tubular Marker Bases	EACH
643.0700 - 0799	Traffic Control Warning Lights (type)	DAY
643.0800	Traffic Control Arrow Boards	DAY
643.0900	Traffic Control Signs	DAY
643.0910	Traffic Control Covering Signs Type I	EACH
643.0920	Traffic Control Covering Signs Type II	EACH
643.1000	Traffic Control Signs Fixed Message	SF
643.1050	Traffic Control Signs PCMS	DAY
643.2000	Traffic Control Detour (project)	EACH
643.3000	Traffic Control Detour Signs	DAY

643.5.2 Traffic Control

- (1) Payment for the Traffic Control bid items is full compensation for constructing, assembling, painting, hauling, erecting, re-erecting, maintaining, restoring, and removing traffic signs, drums, barricades, and similar control devices, including arrow boards, unless provided otherwise; for partially or fully covering or uncovering signs not paid separately under the Traffic Control Covering Signs bid items; for providing, placing, and maintaining lights, including the fuel or power unless provided otherwise; and for providing, applying, and removing pavement markings, unless provided otherwise. If Traffic Control is not specified, but is later found necessary and is required, the department will pay for this work as extra work.
- ⁽²⁾ Payment for the Traffic Control Detour bid items is full compensation for supplying and performing all flagging and guidance services; for providing, installing, reviewing, maintaining, and removing signs associated with guidance services; and for partially or fully covering or uncovering signs not paid separately under the Traffic Control Covering Signs bid items. If the bid item Traffic Control Detour is not specified, but is later found necessary and is required, the department will pay for this work as extra work.

643.5.3 Traffic Control Surveillance and Maintenance

(1) Payment for the Traffic Control Surveillance and Maintenance bid items is full compensation for providing all labor, materials, tools, equipment, vehicles, and incidentals, including reports and telephone charges, necessary to complete the work; and for partially or fully covering or uncovering signs not paid separately under the Traffic Control Covering Signs bid items. The department will not pay for replaced traffic control signs or devices under this bid item; replacement is incidental to the respective contract bid item or items.

643.5.4 Traffic Control Devices

- (1) Payment for Traffic Control Arrow Boards is full compensation for providing, installing, moving, and removing portable, self-contained flashing arrow boards, including auxiliary power supply.
- (2) Payment for Traffic Control Drums is full compensation for providing, installing, moving, and removing drums, including the weights.
- ⁽³⁾ Payment for the Traffic Control Barricades bid items is full compensation for providing, installing, moving, and removing the barricades.
- ⁽⁴⁾ Payment for the Traffic Control Barricades Permanent bid items is full compensation for providing barricades and associated signs and for maintaining the installation until the engineer accepts the work as specified in 105.11.
- ⁽⁵⁾ Payment for the Traffic Control Warning Lights bid items is full compensation for providing, installing, moving, and removing warning lights of the specified type, including mounting hardware, batteries, and hold down devices.
- (6) Payment for Traffic Control Signs is full compensation for providing, installing, moving, and removing traffic control signs, including all posts, signs, mounting hardware, orange flags, and hold down devices; and for partially or fully covering or uncovering signs provided under this bid item.
- (7) Payment for Traffic Control Signs Fixed Message is full compensation for providing all materials; for the manufacture and assembly of the sign, including all messages; for hauling, handling, installing and removing the signs, including posts, fasteners and necessary hardware and vertical supports; and for partially or fully covering or uncovering signs provided under this bid item.
- (8) Payment for Traffic Control Flexible Tubular Marker Posts is full compensation for providing, installing, and maintaining the flexible tubular marker posts, and for removing the posts.
- (9) Payment for Traffic Control Flexible Tubular Marker Bases is full compensation for providing, installing, and maintaining the flexible tubular marker bases; for removing bases; and for repairing damaged pavements. The department will not pay to replace bases inadequately secured to the pavement.
- (10) Payment for Traffic Control Detour Signs is full compensation for providing, erecting, reviewing, maintaining, and removing M-series detour signs or detour signs the plans show, including posts, channels, signs, mounting hardware and flags; and for partially or fully covering or uncovering signs provided under this bid item.
- (11) The department will pay for temporary pavement marking bid items as specified in 649.5.
- ⁽¹²⁾ Payment for Traffic Control Signs PCMS is full compensation for providing PCMS and for operating, maintaining, relocating, and removing the PCMS. The department will pay separately for remote programming required in the contract special provisions.

643.5.5 Covering Signs

(1) Payment for the Traffic Control Covering Signs bid items is full compensation for providing full or partial sign covers, for removing covers, and for repairing or replacing damaged signs. Cover/uncover cycles required to accommodate the contractor's operations are incidental to the contract.

716.2.1 Class II Concrete

Replace paragraph two with the following effective with the June 2012 letting:

(2) Perform random QC testing at the following frequencies:

- 1. Test air content and slump a minimum of once per 100 cubic yards for each mix grade and placement method.
- 2. Cast one set of 2 cylinders per 200 cubic yards for each mix grade and placement method. Cast a minimum of one set of 2 cylinders per contract for each mix grade and placement method. Random 28-day compressive strength cylinders are not required for HES or SHES concrete.
- 3. For deck overlays, perform tests and cast cylinders once per 50 cubic yards of grade E concrete placed.
- 4. For concrete base and base patching, one set of tests and one set of cylinders per 250 cubic yards.

<u>Errata</u>

Make the following corrections to the 2012 edition of the standard specifications:

107.22 Contractor's Responsibility for Utility Facilities, Property, and Services

Correct errata by eliminating references to the department. Costs are determined by statute.

⁽³⁾ If the contractor damages or interrupts service, the contractor shall notify the utility promptly. Coordinate and cooperate with the utility in the repair of the facility. Determine who is responsible for repair costs according to Wisconsin statutes 66.0831 and 182.0175(2).

506.2.6.4 Non-Laminated Elastomeric

(2) The pads shall conform to the following physical properties: Correct the allowable hardness range for natural rubber:

	NATURAL RUBBER	CHLOROPRENE
Hardness (ASTM D2240)	60+/-5	60+/-5

506.2.6.5.2 Pad Construction

Correct errata by changing ASTM A570 to ASTM A1011.

(4) For the internal steel plates use rolled mild steel conforming to ASTM A36, or ASTM A1011 grade

513.2.2.8 Toggle Bolts

Correct errata by changing r ASTM A570 to ASTM A1011.

(1) Use toggle bolts made of steel, confe specified below:	orming to the plans. Make the assembly from the material
Toggle bolt and pin	Cold finished steel heat-treated Brinell 311-363 ASTM A354.
Toggle washer	Hot rolled steel ASTM A1011. Manufacturer's standard washer.
Spacer nut	Grade 1213, ASTM A108. Cold finished steel heat-treated ASTM A325.

634.2.5.1 General

Correct errata by changing ASTM A570 to ASTM A1011.

(2) Fabricate the tubular components using structural quality 12-gauge strip steel conforming to ASTM A1011, grade 50 with an average minimum yield strength, after cold-forming, of 55,000 psi. Punch holes on all 4 sides for the full length as the plans show. Provide corner radii of approximately 5/32 inches and conform to other dimensions and tolerances as follows:

716.2.2 Class III Concrete

Correct errata by changing 715.2.1 to 716.2.1.

(2) Contractor testing for the mix and mix aggregates is not required for the items contained within the certificate of compliance. Conform to 716.2.1 for items not contained within the certificate of compliance.

Effective with November 2006 Letting

ADDITIONAL SPECIAL PROVISION 7

- A. Reporting 1st Tier and DBE Payments During Construction
 - 1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
 - 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.
 - 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: <u>http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm</u>

(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 section 3.2 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at:

http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/docs/crc-basic-info.pdf

Page 1 of 1

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 ActX. Compliance with Governmentwide Suspension and
- 2. 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 designbuild 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-thejob 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.

 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 nonminority 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 <u>Form FHWA-1391</u>. 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-ofway 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 federallyassisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency...

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract. (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30. d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated

damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

 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

T h is p r o v i s i o n i s 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

T h is p r o v i s i o n i s 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 Federalaid 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:

 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:

County	_%_	County	<u>%</u>	County	<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 Minority Participation for Each Trade:

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 2012

ADDITIONAL FEDERAL-AID PROVISIONS

BUY AMERICA

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials 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.

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/cmm/forms/ws4567.doc

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.

WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

- I. Wage Rates, Hours of labor and payment of Wages
- II. Payroll Requirements
- III. Postings at the Site of the Work
- IV. Affidavits
- V. Wage Rate Redistribution
- VI. Additional Classifications

I. WAGE RATES, HOURS OF LABOR AND PAYMENT OF WAGES

The schedule of "Minimum Wage Rates" attached hereto and made a part hereof furnishes the prevailing wage rates that have been determined pursuant to Section 103.50 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the various laborers, workers, mechanics and truck drivers employed by contractors and subcontractors on the construction work embraced by the contract and subject to prevailing hours and wages under Section 103.50, Stats. If necessary to employ laborers, workers, mechanics or truck drivers whose classification is not listed on the schedule, they shall be paid at rates conformable to those listed for similar classifications. Apprentices shall be paid at rates not less than those prescribed in their state indenture contacts.

While the wage rates shown are the minimum rates required by the contract to be paid during its life, this in not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price shall be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

Pursuant to Section 103.50 of the Wisconsin Statutes, the prevailing hours of labor have been determined to be up to 10 hours per day and 40 hours per calendar week Monday through Friday. If any laborer, worker, mechanic or truck driver is permitted or required to work more than the prevailing number of hours per day or per calendar week on this contract, they shall be paid for all hours in excess of the prevailing hours at a rate of at least one and one-half (1 1/2) times their hourly rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half: (1) January 1, (2) the last Monday in May, (3) July 4, (4) the first Monday in September, (5) the fourth Thursday in November, (6) December 25, (7) the day before if January 1, July 4 or December 25 falls on a Saturday and (8) the day following if January 1, July 4 or December 25 falls on a Sunday. All laborers, workers, mechanics and truck drivers shall be paid unconditionally not less often than once a week. Persons who own and operate their own trucks must receive the prevailing truck driver rate for the applicable type of truck (i.e. 2 axle, 3 or more axle, articulated, eculid or dumptor) he or she operates, plus an agreed upon amount for the use of his or her truck. Every owner-operator MUST be paid separately for their driving and for the use of their truck.

For those projects subject to the requirements of the Davis-Bacon Act, the Secretary of Labor will also have determined "Minimum Wage Rates" for work to be performed under the contract. These rates are, for all or most of the labor, worker, mechanic or truck driver classifications, identical to those established under Section 103.50 of the Wisconsin Statutes. In the event the rates are not identical, the higher of the two rates will govern.

II. PAYROLL REQUIREMENTS

All contractors and subcontractors must submit weekly Certified Payrolls and Compliance Statement verifying that all laborers, workers, mechanics and truck drivers working on the project have been paid the prevailing wage rates for all work performed under the contract required by Section 103.50 of the Wisconsin Statutes.

III. POSTINGS AT THE SITE OF THE WORK

In addition to the required postings furnished by the Department, the contractor shall post the following in at least one conspicuous place at the site of work:

- a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 103.50 of the Wisconsin Statutes.
- b. A copy of the State of Wisconsin Minimum Wages Rates. (Four pages.)
- c. A copy of the contractor's Equal Employment Opportunity Policy.
- d. On any project involving federal aid, in addition to the furnished postings, the contractor shall post a copy of the "Davis-Bacon Act, Minimum Wage Rates". (Three pages.)

IV. WAGE RATE REDISTRIBUTION

The amount specified as the hourly basic rate of pay and the amount(s) specified as the fringe benefit contribution(s), for all classes of laborers, workers, mechanics or truck drivers may be redistributed, when necessary, to conform to those specified in any applicable collective bargaining agreement, provided that both parties to such agreement

request and receive the approval for any such redistribution from both the Department of Transportation and the Department of Workforce Development prior to the implementation of such redistribution.

V. ADDITIONAL CLASSIFICATIONS

Any unlisted laborer or mechanic classification that is needed to perform work on this project, and is not included within the scope of any of the classifications listed in the application prevailing wage rate determination, may be added after award only if all of the following criteria have been met:

- 1. The affected employer(s) must make a written request to WisDOT Central Office to utilize the unlisted classification on this project.
- 2. The request must indicate the scope of the work to be performed by the unlisted classification and must indicate the proposed wage/fringe benefit package that the unlisted classification is to receive.
- 3. The work to be performed by the unlisted classification must not be performed by a classification that is included in the applicable prevailing wage rate determination.
- 4. The unlisted classification must be commonly employed in the area where the project is located.
- 5. The proposed wage/fringe benefit package must bear a reasonable relationship to those set forth in the applicable prevailing wage rate determination.
- 6. The request should be made prior to the actual performance of the work by the unlisted classification.
- 7. DWD must approve the use of the unlisted classification and the proposed wage/fringe benefit package. USDOL also must approve the use of the unlisted classification and the proposed wage/fringe benefit package on federal aid projects.
- 8. WisDOT and DWD may amend the proposed wage/fringe benefit package, as deemed necessary, and may set forth specific employment ratios and scope of work requirements in the approval document.

The approved wage/fringe benefit package shall be paid to all laborers, workers, mechanics or truck drivers performing work within the scope of that performed by the unlisted classification, from the first day on which such work is performed. In the event that work is performed by the unlisted classification prior to approval, the wage/fringe benefit package to be paid for such work must be in conformance with the wage/fringe

benefit package approved for such work. Under this arrangement a retroactive adjustment in wages and/or fringe benefits may be required to be made to the affected laborers, workers, mechanics or truck drivers by the affected employer(s).

ANNUAL PREVAILING WAGE RATE DETERMINATION FOR ALL STATE HIGHWAY PROJECTS DANE COUNTY

Compiled by the State of Wisconsin - Department of Workforce Development for the Department of Transportation Pursuant to s. 103.50, Stats. Issued on April 1, 2012

CLASSIFICATION: Contractors are required to call the Department of Workforce Development if there are any guestions reqarding the proper trade or classification to be used for any worker on a public works project.

OVERTIME: Time and one-half must be paid for all hours worked over 10 hours per day and 40 hours per calendar week and for all hours worked on Saturday, Sunday and the following six (6) holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25; the day before if January 1, July 4 or December 25 falls on a Saturday; the day following if January 1, July 4 or December 25 falls on a Saturday.

FUTURE INCREASE: If indicated for a specific trade or occupation, the full amount of such increase MUST be added to the "TOTAL" indicated for such trade or occupation on the date(s) such increase(s) becomes effective.

PREMIUM PAY: If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.

SUBJOURNEY: Wage rates may be available for some of the classifications indicated below. Any employer that desires to use any subjourney classification on a project MUST request the applicable wage rate from the Department of Workforce Development PRIOR to the date such classification is used on such project. Form ERD-10880 is available for this purpose and can be obtained by writing to the Department of Workforce Development, Equal Rights Division, P.O. Box 8928, Madison, WI 53708.

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	32.66	15.92	48.58
Carpenter	30.23	15.16	45.39
Cement Finisher	30.68	15.68	46.36
Future Increase(s): Add \$1.86 on 6/1/12; Add \$1.87 on 6/1/13; Add \$	1.87 on 6/1/14; Ac	dd \$1.87 on 6/1/1	5; Add
\$1.75 on 6/ 1/ 16. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra	te on Sunday. Ne	w Vear's Day M	amorial
Day, Independence Day, Labor Day, Thanksgiving Day & Christmas I			
Department of Transportation or responsible governing agency requir	res that work be p	erformed at night	
artificial illumination with traffic control and the work is completed afte	er sunset and befo	re sunrise.	
Electrician	37.25	14.68	51.93
Fence Erector	35.62	0.00	35.62
Ironworker	30.90	19.11	50.01
Line Constructor (Electrical)	35.97	18.08	54.05
Painter	28.00	11.15	39.15
Pavement Marking Operator	26.65	14.92	41.57
Piledriver	20.56	15.16	44.72
Roofer or Waterproofer	28.06	0.00	28.06
Teledata Technician or Installer	21.26	6.99	28.25
Tuckpointer, Caulker or Cleaner	32.66	16.20	48.86
Underwater Diver (Except on Great Lakes)	36.20	18.81	55.01
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONI	LY 35.42	12.90	48.32
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY		14.27	49.77
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.18	14.07	39.25
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	23.38	12.48	35.86

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY \$	HOURLY FRINGE <u>BENEFITS</u> \$	<u>TOTAL</u> ¢
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	¥ 21.30	⊻ 10.97	₽ 32.27
TRUCK DRIVERS			
Single Axle or Two Axle Future Increase(s): Add \$1.75/hr on 6/1/2012; Add \$1.85/hr on 6/1/ Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate Day, Independence Day, Labor Day, Thanksgiving Day & Christma	e on Sunday, New Ye	16.19 ear's Day, Memo	38.54 rial
Three or More Axle Future Increase(s): Add \$1.75/hr on 6/1/2012; Add \$1.85/hr on 6/1/ Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate Day, Independence Day, Labor Day, Thanksgiving Day & Christma	e on Sunday, New Ye	16.19 ear's Day, Memo	38.69 rial
Articulated, Euclid, Dumptor, Off Road Material Hauler	24.91	15.63	40.54
Pavement Marking Vehicle	23.84	14.76	38.60
Shadow or Pilot Vehicle	24.76	15.35	40.11
Truck Mechanic	24.91	15.35	40.26
LABORERS			
General Laborer Future Increase(s): Add \$1.60/hr on 6/1/2012: Add \$1.70/hr on 6/1/ Premium Pay: Add \$.10/hr for topman, air tool operator, vibrator or operated), chain saw operator and demolition burning torch laborer and luteman), formsetter (curb, sidewalk and pavement) and strike powderman; Add \$.25/hr for bottomman; Add \$.35/hr for line and g DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunda Independence Day, Labor Day, Thanksgiving Day & Christmas Day involving temporary traffic control setup, for lane and shoulder clos conditions is necessary as required by the project provisions (inclue such time period).	tamper operator (me r; Add \$.15/hr for bitu off man; Add \$.20/h grade specialist; Add y, New Year's Day, I y. 2) Add \$1.25/hr fo sures, when work und	echanical hand uminous worker (r for blaster and \$.45/hr for pipela Memorial Day, r work on project der artificial illum	ayer. / s nation
Asbestos Abatement Worker	23.96	12.88	36.84
Landscaper	27.20	13.45	40.65
Future Increase(s): Add \$1.60/hr on 6/1/12; Add \$1.70/hr on 6/1/13 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic Day, Independence Day, Labor Day, Thanksgiving Day & Christma involving temporary traffic control setup, for lane and shoulder clos conditions is necessary as required by the project provisions (include	8; Add \$1.60/hr on 6/ c rate on Sunday, Ne as Day. 2) Add \$1.25 sures, when work und	1/14. w Year's Day, Me /hr for work on p der artificial illumi	emorial rojects nation
such time period).			
such time period). Flagperson or Traffic Control Person Future Increase(s): Add \$1.60/hr on 6/1/2012; Add \$1.70/hr on 6/1/ Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic Day, Independence Day, Labor Day, Thanksgiving Day & Christma Department of Transportation or responsible governing agency req artificial illumination with traffic control and the work is completed a	rate on Sunday, Ne as Day. 2) Add \$1.25 quires that work be p	w Year's Day, Me /hr when the Wis erformed at night	consin
Flagperson or Traffic Control Person Future Increase(s): Add \$1.60/hr on 6/1/2012; Add \$1.70/hr on 6/1/ Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic Day, Independence Day, Labor Day, Thanksgiving Day & Christma Department of Transportation or responsible governing agency req	/2013; Add \$1.60/hr c rate on Sunday, Ne as Day. 2) Add \$1.25 quires that work be p after sunset and befo	on 6/1/2014. w Year's Day, Me /hr when the Wis erformed at night	emorial consin

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY \$	HOURLY FRINGE <u>BENEFITS</u> \$	<u>TOTAL</u> \$
HEAVY EQUIPMENT OPERATORS			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/c Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Towe Derrick, With or Without Attachments, With a Lifting Capacity of Over 10 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Crane With Boom Dollies; Traveling Crane (Bridge Type).	er or 00	18.90	53.12
Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$7 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic r Day, Independence Day, Labor Day, Thanksgiving Day & Christmas involving temporary traffic control setup, for lane and shoulder closul conditions is necessary as required by the project provisions (includi such time period).	ate on Sunday, Nev Day. 2) Add \$1.25 res, when work und	/hr for work on p ler artificial illumi	rojects nation
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tow Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With of Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Und Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilo (NOT Performing Work on the Great Lakes); Pile Driver.	ver or ;; or der;	18.90	52.62
Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$ Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic r. Day, Independence Day, Labor Day, Thanksgiving Day & Christmas involving temporary traffic control setup, for lane and shoulder closur conditions is necessary as required by the project provisions (includi such time period).	ate on Sunday, Nev Day. 2) Add \$1.25 res, when work und	/hr for work on p ler artificial illumi	rojects nation
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Scr Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr. 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, Vlbratory/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 & Gu Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane WIth a Liftin Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Sheat Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; G Pump; Hydro-Blaster (10,000 PSI or Over); Loading 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 Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Typ Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Wir	reed; 's itter ng r, Tub irrout r); e r Rig; or pe);	18.90	52.12

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
& A- Frames. Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$7 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic r Day, Independence Day, Labor Day, Thanksgiving Day & Christmas involving temporary traffic control setup, for lane and shoulder closur conditions is necessary as required by the project provisions (includi such time period).	1.75/hr on 6/1/14. ate on Sunday, Ne 5 Day. 2) Add \$1.25 res, when work und	w Year's Day, Mo /hr for work on p ler artificial illum	rojects ination
Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concre Finishing Machine (Road Type); Environmental Burner; Farm or Industr Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Perforr Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work or 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; Shoulderi Machine; Skid Steer Loader (With or WIthout Attachments); Telehandle Tining or Curing Machine. Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$7 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic r Day, Independence Day, Labor Day, Thanksgiving Day & Christmas involving temporary traffic control setup, for lane and shoulder closur conditions is necessary as required by the project provisions (includi such time period).	rial ming Jeep n the ing er; 1.75/hr on 6/1/14. rate on Sunday, Ne 5 Day. 2) Add \$1.25 res, when work und	/hr for work on p ler artificial illum	rojects ination
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacki System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surg 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 Mach Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or V Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$7 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic re-	ge hine); Well ; 1.75/hr on 6/1/14. rate on Sunday, Ne	/hr for work on p	rojects
Day, Independence Day, Labor Day, Thanksgiving Day & Christmas involving temporary traffic control setup, for lane and shoulder closur conditions is necessary as required by the project provisions (includi such time period).	ing prep time prior t		

SUPERSEDES DECISION WI20070010 U. S. DEPARTMENT OF LABOR (DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

	Basic Hourly	Fringe
LABORERS CLASSIFICATION:	Rates	<u>Benefits</u>
Group 1: General Laborer; Tree Trimmer; Conduit Layer;		
Demolition and Wrecking Laborer; Guard Rail, Fend	ce	
and Bridge Builder; Landscaper, Multiplate Culvert		
Assembler; Stone Handler; Bituminous Worker (Sho	oveler,	
Loader, Utility Man); Batch Truck Dumper; or Cem	nent Handler;	
Bituminous Worker; (Dumper, Ironer, Smoother, Ta	amper);	
Concrete Handler	\$27.20	13.45
Group 2: Air Tool Operator; Joint Sawer and Filler (Pavemen	nt);	
Vibrator or Tamper Operator (Mechanical Hand Op	erated);	
Chain Saw Operator; Demolition Burning Torch Lat	borer	13.45
Group 3: Bituminous Worker (Raker and Luteman); Formsett	er	
(Curb, Sidewalk, and Pavement); Strike Off man		13.45
Group 4: Line and Grade Specialist		
Group 5: Blaster and Powderman		13.45
Group 6: Flagperson and Traffic Control Person		13.45

Truck Drivers:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
1 & 2 Axles	23.16	17.13
Three or More Axles; Euclids, Dumptor &		
Articulated, Truck Mechanic		17.13

CLASSES OF LABORER AND MECHANICS

 14.81
5
 16.71
 16.27
 3.70
28.41 30.56 32.16 31.06 31.25 32.09 38.25 34.43 30.60 26.78 24.86 21.04 24.50 25.50 16.52

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 March 12, 2010; Modification 1, dated March 19, 2010; Modification 2, dated June 4, 2010; Modification 3, dated July 2, 2010; Modification 4, dated August 6, 2010; Modification 5, dated September 3, 2010; Modification 6, dated October 1, 2010, Modification 7, dated November 5, 2010; Modification 8; dated November 15, 2010; Modification 9, dated January 7, 2011; Modification #10 dated February 11, 2011; Modification #11 dated May 6, 2011; Modification #12 dated May 13, 2011; Modification #13 dated June 3, 2011; Modification #14 dated July 29, 2011; Modification #15 dated August 12, 2011; Modification #16 dated August 26, 2011; Modification #17 dated September 16, 2011; Modification #18 dated October 14, 2011; Modification #19 dated November 11, 2011; Modification #0, dated January 6, 2012; Modification #1 dated January 13, 2012; Modification #2 dated February 3, 2012; Modification #3 dated February 10, 2012; Modification #4 dated March 2, 2012; Modification #5 dated May 4, 2012; Modification #6 dated May 11, 2012; Modification #7 dated June 1, 2012; Modification #8 dated June 15, 2012; Modification #9 dated July 6, 2012; Modification #10 dated August 3, 2012; Modification #11 dated August 31, 2012; Modification #12 dated September 28, 2012.

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction DATE: September 28, 2012 Basic Hourly Fringe POWER EQUIPMENT OPERATORS Basic Hourly Fringe POWER EQUIPMENT OPERATORS CLASSIFICATION: CLASSIFICATION: (Continued) Rates Benefits Rates Benefits (scraper, dozer, pusher, loader); scraper -Group 1: Cranes, tower cranes and derricks, with or without attachments, with a rubber tired (single or twin engine); lifting capacity of over 100 tons endloader hydraulic backhoe (tractor-type); or cranes. tower cranes and trenching machine; skid rigs; tractor, side derricks with boom. leads and/or boom (heavy); drilling or boring machine jib lengths measuring 176 feet or (mechanical heavy); roller (over 5 tons); \$35.22 \$19.65 percussion or rotary drilling machine; air longer track: blaster: loading machine (convevor): Group 2: Cranes, tower cranes and derricks. tugger; boatmen; winches and A-frames; post with or without attachments, with a driver; material hoist operator. \$34.22 \$19.65 lifting capacity of 100 tons or less or cranes, tower cranes and Group 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self-propelled; derricks with boom. leads and/or jib lengths measuring 175 feet or tractor (mounted or towed compactors and less, and backhoes (excavators) light equipment); shouldering machine; having a manufacturer's rated self-propelled chip spreader; concrete capacity of 3 cu. yds. and over, spreader; finishing machine; mechanical caisson rigs, pile driver, dredge float; curing machine; power subgrader; operator, dredge engineer..... \$34.72 \$19.65 joint saw (multiple blade) belting machine: burlap machine: texturing Group 3: Mechanic or welder - heavy duty machine; tractor, endloader (rubber equipment, cranes with a lifting capacity tired) - light; jeep digger; fork lift; of 25 tons or less, concrete breaker mulcher; launch operator; fireman; (manual or remote); vibrator/sonic concrete environmental burner. \$33.96 \$19.65 breaker; concrete laser screed; concrete slipform paver; concrete batch plant Group 5: Air compressor; power pack; vibratory operator; concrete pavement spreader - heavy hammer and extractor; heavy equipment, duty (rubber tired); concrete spreader and leadman; tank car heaters; stump chipper; distributor, automatic subgrader (concrete): curb machine operator: concrete proconcrete grinder and planing machine; concrete portioning plants generators; mudjack slipform curb and gutter machine: slipform operator: rock breaker: crusher or concrete placer; tube finisher; hydro blaster screening plant; screed (milling machine); (10,000 psi and over); bridge paver; concrete automatic belt conveyor and surge bin; conveyor system; concrete pump; stabilizing pug mill operator; oiler; pump (over 3 inches); mixer (self propelled); shoulder widener; drilling machine helper..... \$33.67 \$19.65 asphalt plant engineer; bituminous paver; bump cutter and grooving machine; milling machine; Group 6: Off - road material hauler with or without ejector \$27.77 \$19.65 screed (bituminous paver); asphalt heater, planer and scarifier; backhoes (excavators) having a manufacturers rated capacity of under Premium Pav: 3 cu. yds.; grader or motor patrol; tractor EPA Level "A" protection - \$3.00 per hour EPA Level "B" protection - \$2.00 per hour EPA Level "C" protection - \$1.00 per hours

STATE: Wisconsin

DECISION NUMBER: W1080010

SUPERSEDES DECISION WI20070010 U. S. DEPARTMENT OF LABOR (DAVIS-BACON ACT, MINIMUM WAGE RATES)

 STATE: Wisconsin
 (DAVIS)

 DECISION NUMBER: W1080010
 DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

 LABORERS CLASSIFICATION:
 Rates
 Benefits

DATE: September 28, 2012

Electricians		
Area 1	\$27.80	16.52
Area 2:	• • • •	
Electricians	29.13	17.92
Area 3:		
Electrical contracts under \$130,000	26.24	16.85
Electrical contracts over \$130,000	29.41	16.97
Area 4:	28.10	17.24
Area 5	28.61	16.60
Area 6	35.25	19.30
Area 8		
Electricians	30.00	17.76
Area 9:	50.00	17.70
Electricians	32.94	18.71
Area 10	28.97	19.55
Area 11	31.27	23.12
Area 12	32.87	19.22
Area 13	32.20	21.64
	52.20	21.04
Teledata System Installer		
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), GR	REEN LAKE	
(N part including Townships of Berlin, St. Marie a	nd Seneca)	

- Area1 CALUMET (except township of New Holstein), GREEN LAKE (N. part, including Townships of Berlin, St. Marie and Seneca), MARQUETTE (N. part, including Townships of Crystal Lake, Neshkoro, Newton & Springfield), OUTAGAMIE, WAUPACA, WAUSHARA and WINNEBAGO COUNTIES.
- Area 2 ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Mayville, Colby, Unity, Sherman, Fremont, Lynn and Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST. CROIX, SAWYER, TAYLOR, TREMPEALEAU, VERNON and WASHBURN COUNTIES
- Area 3 FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)

Area4-	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.
Area5-	ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausaukee), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Area North of the townships of Aniwa and Hutchins), VILAS AND WOOD COUNTIES
Area6-	KENOSHA COUNTY
Area8-	DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES
Area9-	COLUMBIA, DANE, DODGE, (area west of Hwy. 26, except Chester & Emmet Townships), GREEN LAKE (except townships of Berlin, Seneca and St. Marie), IOWA, MARQUETTE (except townships of Neshkoka, Crystal Lake, Newton and Springfield), and SAUK COUNTIES
Area 10 -	CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES
Area 11 -	DOUGLAS COUNTY
Area 12 -	RACINE (except Burlington township) COUNTY
Area 13 -	MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES
Area 14 -	Statewide.
Area 15 -	DODGE (Fast of Hwy 26 including Chester Twn, excluding Emmet Twn) FOND DULAC

Area 15 - DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES.

FEBRUARY 1999

NOTICE TO BIDDERS WAGE RATE DECISION

The wage rate decision of the Secretary of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Secretary of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omision of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, <u>per se</u>, 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.

	Wisconsin Department o	of Transportation	PAGE:	1
			DATE:	08/09/12
	SCHEDULE OF	ITEMS	REVISED:	
CONTRACT:	PROJECT(S):	FEDERAL ID(S)	:	
20121113002	1010-00-72	WISC 2012	600	

CONTRACTOR :_____

LINE	ITEM	APPROX.	UNIT PRICE	BID AMOUNT	
NO	DESCRIPTION	QUANTITY			
		AND UNITS	DOLLARS CTS	DOLLARS CTS	

SECTION 0001 CONTRACT ITEMS

204.0100 REMOVING 761.000 0010 PAVEMENT 761.000 SY 761.000 0020 PAVEMENT BUTT JOINTS 18,793.000 0030 PAVEMENT BUTT JOINTS 18,793.000 0030 ASPHALTIC SURFACE 3,554.000 204.0115 REMOVING .	
0020 PAVEMENT BUTT JOINTS 18,793.000 . SY . 204.0110 REMOVING . 0030 ASPHALTIC SURFACE 3,554.000 . SY .	• •
0030 ASPHALTIC SURFACE 3,554.000	•
204.0115 REMOVING	
0040 ASPHALTIC SURFACE BUTT 14,636.000 . JOINTS SY .	
204.0150 REMOVING CURB & 0050 GUTTER 6,050.000 LF .	•
204.0165 REMOVING 0060 GUARDRAIL 4,250.000 LF .	•
204.9060.S REMOVING 0070 (ITEM DESCRIPTION) 01. 170.000 DELINEATORS EACH .	
205.0100 EXCAVATION 0080 COMMON 2,247.000	•
208.1100 SELECT BORROW	•
213.0100 FINISHING 0100 ROADWAY (PROJECT) 01. 1.000 1010-00-72 EACH .	

	Wisconsin Department c	of Transportation	PAGE:	2
			DATE:	08/09/12
	SCHEDULE OF	ITEMS	REVISED:	
CONTRACT:	PROJECT(S):	FEDERAL ID(S)	:	
20121113002	1010-00-72	WISC 2012	600	

CONTRACTOR :_____

LINE NO	1	APPROX.	UNIT PRICE	BID AMOUNT	
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS	
	305.0110 BASE AGGREGATE DENSE 3/4-INCH 	 8,960.000 TON	 		
0120	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH 	 1,790.000 TON			
0130	312.0110 SELECT CRUSHED MATERIAL 	 1,100.000 TON			
0140	390.0403 BASE PATCHING CONCRETE SHES	 110.000 SY			
	416.0610 DRILLED TIE BARS 	 1,719.000 EACH	- -		
	416.0620 DRILLED DOWEL BARS 	 160.000 EACH	- -		
	440.4410.S INCENTIVE IRI RIDE 	 61,400.000 DOL	1.00000	61400.00	
	465.0305 ASPHALTIC SURFACE SAFETY ISLANDS 	 455.000 TON			
	465.0400 ASPHALTIC SHOULDER RUMBLE STRIP 	 97,700.000 LF			
	495.0100.S WARRANTED HMA PAVEMENT OVERLAY MAINLINE	 69,000.000 TON			
0210	495.0200.S WARRANTED HMA PAVEMENT OVERLAY ANCILLARY	 6,700.000 TON	 		
	Wisconsin Department o	of Transportation	PAGE:	3	
-------------	------------------------	-------------------	----------	----------	
			DATE:	08/09/12	
	SCHEDULE OF	ITEMS	REVISED:		
CONTRACT:	PROJECT(S):	FEDERAL ID(S)	:		
20121113002	1010-00-72	WISC 2012	2600		

LINE	1	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CT
0220	601.0553 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D	 1,990.000 LF	 .	 .
	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	 1,150.000 LF	 .	 .
	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	 1,150.000 LF	 .	 .
0250	611.8115 ADJUSTING INLET COVERS 	 111.000 EACH		
	614.0400 ADJUSTING STEEL PLATE BEAM GUARD 	 3,375.000 LF		
0270	614.2300 MGS GUARDRAIL 3 	 14,612.500 LF		 .
	614.2500 MGS THRIE BEAM TRANSITION 	 197.000 LF		
0290	614.2610 MGS GUARDRAIL TERMINAL EAT 	 13.000 EACH	 	 .
	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 	 13.000 EACH		 .
0310	619.1000 MOBILIZATION	 1.000 EACH	 	··
	620.0300 CONCRETE MEDIAN SLOPED NOSE 	 335.000 SF	 .	 .

	S	CHEDULE OF ITEMS	REV	GE: 4 FE: 08/09/12 VISED:
	ACT: PROJEC 21113002 1010		FEDERAL ID(S): WISC 2012600	
CONTRA	ACTOR :			
LINE NO	ITEM DESCRIPTION	APPROX.	UNIT PRICE	BID AMOUNT
0330	 624.0100 WATER 	AND UNITS 65.000 MGAL	 	DOLLARS CTS
	625.0500 SALVAGED TOPSOIL 	 28,100.000 SY	 .	 .
0350	627.0200 MULCHING 	 28,100.000 SY	 .	 .
0360	628.1504 SILT FENCE 	 13,900.000 LF	 .	 .
	628.1520 SILT FENCE MAINTENANCE 	 13,900.000 LF		 .
	628.1905 MOBILIZATIONS EROSION CONTROL 	 8.000 EACH		 .
0390	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL	 6.000 EACH		 .
	628.2004 EROSION MAT CLASS I TYPE B 	 14,230.000 SY		 .
	628.7504 TEMPORARY DITCH CHECKS 	 24.000 LF	 .	 .
0420	629.0210 FERTILIZER TYPE B 	 34.000 CWT	 .	 .
	630.0130 SEEDING MIXTURE NO. 30 	 950.000 LB	 .	 .

	ACT: PRO	n Department of Tra SCHEDULE OF ITEMS JECT(S): 010-00-72		DATE: 08/09/12 REVISED: :
CONTRA	ACTOR :			
LINE NO	ITEM DESCRIPTION	APPROX.	UNIT PRICE	
	 	AND UNITS	DOLLARS C	TS DOLLARS CTS
	630.0200 SEEDING TEMPORARY 	 1,400.000 LB		
	633.0100 DELINEATOR POSTS STEEL 	223.000 EACH	 .	.
	633.0500 DELINEATOR REFLECTORS 	 616.000 EACH	 .	.
	633.1000 DELINEATOR BRACKETS 	305.000 EACH	 .	.
	634.0614 POSTS WOOD 4X6-INCH X 14-FT 	 25.000 EACH	 .	.
	634.0616 POSTS WOOD 4X6-INCH X 16-FT 	9.000 EACH	 .	.
	634.0618 POSTS WOOD 4X6-INCH X 18-FT 	54.000 EACH	 .	.
	634.0620 POSTS WOOD 4X6-INCH X 20-FT 	 49.000 EACH	 .	.
	634.0622 POSTS WOOD 4X6-INCH X 22-FT 	 16.000 EACH	 .	.
0530	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS 	 3,775.500 LB	 .	.

636.0100 SIGN SUPPORTS

0540 CONCRETE MASONRY ĺ

7.100 CY

1

I

_ _

•

.

	Wisconsin Department o	of Transportation	PAGE:	6
			DATE:	08/09/12
	SCHEDULE OF	ITEMS	REVISED:	
CONTRACT:	PROJECT(S):	FEDERAL ID(S)	:	
20121113002	1010-00-72	WISC 2012	600	

LINE NO	ITEM DESCRIPTION	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	AND UNITS	DOLLARS CTS	DOLLARS CTS
0550	636.0500 SIGN SUPPORTS STEEL REINFORCEMENT	 414.000 LB	 .	 .
0560	637.0101 SIGNS TYPE I 	 2,185.000 SF	 .	 .
	637.0202 SIGNS REFLECTIVE TYPE II 	 898.000 SF		
0580	637.0402 SIGNS REFLECTIVE FOLDING TYPE II	 60.000 SF		
0590	638.2102 MOVING SIGNS TYPE II	 2.000 EACH		 .
0600	638.2601 REMOVING SIGNS TYPE I	 18.000 EACH		 .
0610	638.2602 REMOVING SIGNS TYPE II	 147.000 EACH		
	638.3000 REMOVING SMALL SIGN SUPPORTS	 107.000 EACH		
0630	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS	6.000 EACH		 .
0640	638.3620 ERECTING STATE OWNED SIGNS TYPE II	 167.000 EACH	 .	 .
0650	638.4000 MOVING SMALL SIGN SUPPORTS	2.000 EACH		

	Wisconsin Department	of Transportation	PAGE:	7
			DATE:	08/09/12
	SCHEDULE OF	7 ITEMS	REVISED:	
CONTRACT:	PROJECT(S):	FEDERAL ID(S)	:	
20121113002	1010-00-72	WISC 2012	600	

LINE		APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY	DOLLARS CTS	DOLLARS CTS
	642.5401 FIELD OFFICE TYPE D	 1.000 EACH	 .	 .
0670	643.0100 TRAFFIC CONTROL (PROJECT) 01. 1010-00-72	 1.000 EACH	 .	 .
0680	643.0300 TRAFFIC CONTROL DRUMS	 21,720.000 DAY		
0690	643.0420 TRAFFIC CONTROL BARRICADES TYPE III	 1,506.000 DAY		 .
0700	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A	 354.000 DAY		 .
0710	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C	 3,614.000 DAY		
0720	643.0800 TRAFFIC CONTROL ARROW BOARDS	 377.000 DAY		
	643.0900 TRAFFIC CONTROL SIGNS	 4,921.000 DAY		
	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II	 688.000 EACH		 .
	646.0106 PAVEMENT MARKING EPOXY 4-INCH 	 51,750.000 LF	 .	··
0760	646.0406 PAVEMENT MARKING SAME DAY EPOXY 4-INCH	 52,500.000 LF	 .	

	Wisconsin Department	of Transportation	PAGE:	8
			DATE:	08/09/12
	SCHEDULE OF	7 ITEMS	REVISED:	
CONTRACT:	PROJECT(S):	FEDERAL ID(S)	:	
20121113002	1010-00-72	WISC 2012	600	

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT PRICE	BID AMOUNT
NO		AND UNITS	DOLLARS CTS	DOLLARS CTS
	646.0873.S PAVEMENT MARKING WET REFLECTIVE TAPE 8-INCH	 12,888.000 LF	 .	 .
0780	646.0881.S PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH	 28,915.000 LF 	 .	 .
	647.0746 PAVEMENT MARKING DIAGONAL EPOXY 24-INCH	 890.000 LF	 .	 .
0800	649.0200 TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	 174,900.000 LF 	 .	 .
	650.4500 CONSTRUCTION STAKING SUBGRADE	 1,140.000 LF	 .	 .
	650.5000 CONSTRUCTION STAKING BASE	 1,140.000 LF	 .	 .
	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE	 55,500.000 LF		 .
0840	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1010-00-72	 LUMP 	 LUMP 	 .
0850	650.9920 CONSTRUCTION STAKING SLOPE STAKES	 44,170.000 LF	 .	 .
0860	652.0125 CONDUIT RIGID METALLIC 2-INCH	 10.000 LF		 .

	Wisconsin Department	of Transportation	PAGE:	9
			DATE:	08/09/12
	SCHEDULE OF	ITEMS	REVISED:	
CONTRACT:	PROJECT(S):	FEDERAL ID(S)	:	
20121113002	1010-00-72	WISC 2012	600	

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT PRICE	BID AMOUNT
NO		AND UNITS	DOLLARS CTS	 DOLLARS CTS
	652.0210 CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH	 115.000 LF	 .	 .
	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	 1,370.000 LF	 .	 .
	652.0605 CONDUIT SPECIAL 2-INCH	 100.000 LF		
	653.0135 PULL BOXES STEEL 24X36-INCH	 7.000 EACH		
	653.0140 PULL BOXES STEEL 24X42-INCH	 5.000 EACH	 .	 .
	654.0105 CONCRETE BASES TYPE 5	 5.000 EACH		 .
	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	 11,210.000 LF		 .
	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG	 100.000 LF		 .
0950	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG	 300.000 LF	 .	 .
	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. MBHA05	 LUMP 	 LUMP 	

	Wisconsin Department o	f Transportation	PAGE:	10
			DATE:	08/09/12
	SCHEDULE OF	ITEMS	REVISED:	
CONTRACT:	PROJECT(S):	FEDERAL ID(S)	:	
20121113002	1010-00-72	WISC 2012	600	

LINE	1	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS
0970	656.0500 ELECTRICAL SERVICE BREAKER DISCONNECT BOX (LOCATION) 01. DMS-13-0023	 LUMP 	 LUMP 	 .
0980	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	 5.000 EACH	 .	 .
0990	659.0802 PLAQUES SEQUENCE IDENTIFICATION	 1.000 EACH		 .
1000	670.0100 FIELD SYSTEM INTEGRATOR 	 LUMP 	 LUMP 	
	670.0200 ITS DOCUMENTATION 	 LUMP 		 .
	673.0225.S INSTALL POLE MOUNTED CABINET 	 1.000 EACH	 .	 .
1030	690.0150 SAWING ASPHALT	 10.000 LF	 .	 .
1040	690.0250 SAWING CONCRETE	 8,910.000 LF	 .	 .
	ASP.1T0A ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	 550.000 HRS	5.00000	2750.00
	ASP.1T0G ON-THE-JOB TRAINING GRADUATE AT \$5. 00/HR	 800.000 HRS	5.00000	4000.00

	Wisconsin Department	: of Transpor	tation	PAGE:	11
				DATE:	08/09/12
	SCHEDULE C	OF ITEMS		REVISED:	
CONTRACT:	PROJECT(S):	FEDE	RAL ID(S)	:	
20121113002	1010-00-72	W	ISC 2012	600	

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT PRICE	BID AMOUNT
NO		AND UNITS	DOLLARS CTS	DOLLARS
1070	SPV.0045 SPECIAL 01. PORTABLE CHANGEABLE MESSAGE SIGN	 537.000 DAY	 .	 .
1080	SPV.0060 SPECIAL 01. RAMP CLOSURE GATES HARDWIRED 32-FT	 1.000 EACH	 .	 .
1090	SPV.0060 SPECIAL 02. RAMP CLOSURE GATES ARMS STOCKPILE 32-FT	 1.000 EACH		
1100	SPV.0060 SPECIAL 03. RAMP CLOSURE GATES HARDWIRED 26-FT	 2.000 EACH		
1110	SPV.0060 SPECIAL 04. RAMP CLOSURE GATES HARDWIRED 24-FT	 2.000 EACH		
1120	SPV.0060 SPECIAL 05. MARKER POSTS FLEXIBLE FOR GUARDRAIL TERMINAL	 13.000 EACH		 .
1130	SPV.0060 SPECIAL 06. INSTALL SPREAD SPECTRUM RADIO	 2.000 EACH	 	 .
1140	SPV.0060 SPECIAL 07. INSTALL CABINET MOUNT YAGI ANTENNA	 1.000 EACH		
1150	SPV.0060 SPECIAL 08. INSTALL POLE MOUNT YAGI ANTENNA	 1.000 EACH		 .
1160	SPV.0060 SPECIAL 09. INSTALL GROUND MOUNT DYNAMIC MESSAGE SIGN	 1.000 EACH	 .	 .
1170	SPV.0060 SPECIAL 10. INSTALL TERMINAL SERVER 	 1.000 EACH		 .

	Wisconsin Department o	of Transportation	PAGE:	12
			DATE:	08/09/12
	SCHEDULE OF	ITEMS	REVISED:	
CONTRACT:	PROJECT(S):	FEDERAL ID(S)	:	
20121113002	1010-00-72	WISC 2012	600	

LINE	1	APPROX		UNIT P	RICE	BID AM	OUNT
NO	DESCRIPTION	QUANTIT		DOLLARS	CTS	DOLLARS	CTS
	SPV.0060 SPECIAL 11. GROUND ROD 	 EACH	1.000		·	 	
	SPV.0060 SPECIAL 12. GROUNDING PULL BOX	 1 EACH	5.000			 	•
1200	SPV.0090 SPECIAL 01. REMOVING HMA PAVEMENT TAPERED & NOTCHED LONGITUDINAL JOINTS MILLING	441,00	0.000			 	
1210	SPV.0090 SPECIAL 02. CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A SPECIAL	 3,95 LF 	0.000			 	
	SPV.0090 SPECIAL 03. SAWING CONCRETE PARTIAL SAWCUT	 1,27 LF	0.000		·	 	
	SPV.0180 SPECIAL 01. MILLING & ASPHALT FILL CRACK TREATMENT	 20 SY	0.000		·	 	
	SPV.0180 SPECIAL 02. CONTINUOUSLY REINFORCED CONCRETE PAVEMENT SHES REPAIR	1,25 SY 	0.000				
	SECTION 0001 TOTAL						•
	 TOTAL BID						

PLEASE ATTACH SCHEDULE OF ITEMS HERE



October 24, 2012

Division of Transportation Systems Development Bureau of Project Development 4802 Sheboygan Avenue, Rm 601 P O Box 7916 Madison, WI 53707-7916

Telephone: (608) 266-1631 Facsimile (FAX): (608) 266-8459

NOTICE TO ALL CONTRACTORS:

Proposal #02: 1010-00-72, WISC 2012 600 Madison – Lake Delton Road (Lien Road – USH 51) IH 39 Dane County

Letting of November 13, 2012

This is Addendum No. 1, which provides for the following:

Special Provisions

	Revised Special Provisions	
Article Description		
3	Prosecution and Progress	
4	Traffic	

	Added Special Provisions	
Article No.	Description	
42	Shorten Structural Steel Sign Supports, SPV.0060.13	

Schedule of Items

	Revised Bid Item Qu	antities			
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
637.0101	Signs Type I	SF	2185	2167	2167
643.0300	Traffic Control Drums	DAY	21,720	25,555	25,555
643.0420	Traffic Control Barricades Type III	DAY	1,506	1,340	1,340
643.0705	Traffic Control Warning Lights Type A	DAY	354	388	388
643.0715	Traffic Control Warning Lights Type C	DAY	3,614	4,775	4,775
643.0800	Traffic Control Arrow Boards	DAY	377	415	415
643.0900	Traffic Control Signs	DAY	4,921	5,113	5,113
643.0920	Traffic Control Covering Signs Type II	EACH	688	742	742
SPV.0045.01	Portable Changeable Message Sign	DAY	537	534	534

	Added Bid Item Qua	Intities			
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
SPV.0060.13	Shorten Structural Steel Sign Supports	EACH	0	2	2

Plan Sheets

	Revised Plan Sheets
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
1	Title Sheet (Added ESALs)
62	Permanent Signing (Revised sign size and message to "Madison College" on Sign 3-15)
73	Construction Staging (Changed lane closure setup allowing 1 lane for traffic on work zone side)
75	Construction Staging (Changed lane closure setup allowing 1 lane for traffic on work zone side)
77	Construction Staging (Changed to Stage 2A, 3A with modified lane closure setup allowing 3 lanes for traffic)
78	Construction Staging (Changed to Stage 2B, 3B with modified lane closure setup moving traffic to outside 2 lanes)
79	Construction Staging (Changed to Stage 2C, 3C with modified lane closure setup moving traffic to outside lanes with work zone in middle lane)
80	Construction Staging (Changed to Stage 2D, 3D with modified lane closure setup moving traffic to outside lanes with work zone in middle lane)
81	Construction Staging (Changed lane closure setup allowing 2 lanes for traffic on work zone side)
82	Construction Staging (Changed lane closure setup allowing 3 lanes for traffic on work zone side)
113	Miscellaneous Quantities (Revised quantity for Signs Type I and added item SPV.0060.13 Shorten Structural Steel Sign Supports)
117	Miscellaneous Quantities (Revised quantities for all Traffic Control items)
166	Permanent Signing (Changed the message on sign E3-1 to Madison College and the size of the sign)

	Added Plan Sheets
Plan Sheet	Plan Sheet Title (brief description of why sheet was added)
94A	Traffic Control (Show revised Stage 2C, 2D,3C,& 3D setup for NB IH 39 south of USH 151 interchange)
94B	Traffic Control (Show revised Stage 2C, 2D,3C,& 3D setup for NB IH 39 south of USH 151 interchange)
94C	Traffic Control (Show revised Stage 2C, 2D,3C,& 3D setup for NB IH 39 south of USH 151 interchange)
94D	Traffic Control (Show revised Stage 2C, 2D,3C,& 3D setup for SB IH 39 south of USH 151 interchange)
94E	Traffic Control (Show revised Stage 2C, 2D,3C,& 3D setup for SB IH 39 south of USH 151 interchange)

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Terry Lammert

Proposal Development Specialist Proposal Management Section

ADDENDUM NO. 1 1010-00-72 October 24, 2012

Special Provisions

3. **Prosecution and Progress**

Add the following paragraph:

Do not close the westbound IH 39 entrance ramps from USH 151 after June 14, 2013.

4. Traffic

Add the following paragraph to the end of the **E Lane Closures** section:

For work to be performed on the left center and right center lanes south of the USH 151 interchange, use a double lane closure of the two middle lanes. Through IH 39 traffic is to be moved to the median lane. For westbound IH 39, keep westbound IH 94 traffic on the outside lane and have IH 39 traffic going to USH 151 use a slotted exit ramp and merge with the westbound IH 94 traffic south of the construction zone. For eastbound IH 39, keep traffic from the USH 151 and High Crossing Blvd entrance ramps on the outside lane through the construction zone.

Delete the second paragraph under F Ramp Closures and replace with the following:

Close the westbound IH 39 entrance ramp from eastbound STH 30 immediately prior to and during single and double lane closures of the westbound median and left center and right center lanes at the south end of the project whenever these lane closures extend south of the exit ramp to High Crossing Boulevard and USH 151.

42. Shorten Structural Steel Sign Supports, Item SPV.0060.13.

A Description

Remove, shorten, and re-install structural steel sign supports in accordance with section 635 of the standard specifications, as shown on the plans, and as hereinafter provided.

B Materials

Provide materials that are in accordance to Section 635 of the standard specifications and as hereinafter provided.

C Construction

Remove the structural steel sign supports from their foundations. Shorten the structural steel sign supports to the length specified in the plans by cutting perpendicular to the length of the support. Remove burrs from cut edges. Clean cut areas and repaired damaged zinc coating in accordance with Section 635.3.4 of the standard specifications. Re-install structural steel sign supports on bases and replace base bolts to the torques specified on the A3-1 sign plate.

D Measurement

The department will measure Shorten Structural Steel Sign Supports as each individual structural steel sign support acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.13Shorten Structural Steel Sign SupportsEACH

Payment is full compensation for removing existing structural steel sign support, cutting, cleaning and repairing damaged zinc coating, re-installation of structural steel sign supports, furnishing and installing new base connection bolts and aluminum extrusion connecting hardware; and for furnishing all labor, equipment, tools and incidentals necessary to complete the contract work.

Schedule of Items

Attached, dated October 24, 2012, are the revised Schedule of Items Pages 6,7 and 12.

Plan Sheets

The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal: Revised: 1,62,73,75,77-82,113,117,166. Added: 94A-E.

END OF ADDENDUM































<u> </u>	13
REMARKS INSTALL AT 343-60 WB INSTALL AT 343-60 WB INSTALL AT 322-00 EB INSTALL AT 372-00 EB	С. Анг С
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
688.3100 REMORTANCE SIRUCTUAN SIGE E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E	Y
REMOVING SIGN TPPEI TPPEI	MISCELLANEDIIS OLIANTITIES
837.00 842.00 2.61 2 2 2.61 2 2.61 2 2 2.61 2 2.61 2 2 2.61 2 2 2.61 2 2 2.61 2 2 2.61 2 2 2.	
PERMANNANT TYPE LISIONS 1 States Statement 1 1 E EINANNENT TYPE LISIONS 1 E REINFORCE MENT 1 E EINE 264	, in the second s
PERMAN 633.0100 * Standard TS CONCREPCITS MASONRY 15 15 15 15 15 15 15 15 15 15	
α 1 1 1 1 1 α 1 1 α 1 1 1 1 1 1 1 1 1 1	COLINITY: DANF
865.0000* SIGN SUPPORTS STRUCTURAL 16 465 11,1093 11,003 11,003 1	
8088 PLATE 8155 PLATE 8154 PLATE 8154 PLATE 8154 PLATE 8154 PLATE 8155 PLATE	
Size SiGN NX N NX N 122 x 30 122 x 30 122 x 30 185 x 30 185 x 30 186 x 173 186 x 173 1	6 ~
NUMER OF THE SECONDECTION OF THE SECONDECTION SECONDECTIO	HI SAWH
STATION STATION 210-00 EB 210-00 EB 227+55 WB 227+55 WB 227+550 WB 227+550 WB 227+550 WB 227+550 WB 227+550 WB 227+5	
GROUP CODE 010 270-001EB KT 277-350 MB LT 277-350 MB LT 277-	PROJECT NO: IDIO-OD-72

	638.4000 MOVING	AML SGN SUPPORTS EACH EACH NSTALLAT 356-00 EB 2 INSTALLAT 456-50 EB 2	٩	REMARKS		INCLUDES RAMIP CLOSURE FREWARNINGS INCLUDES RAMIP CLOSURE PREWARNINGS INCLUDES RAMIP CLOSURE PREWARNINGS	INCLUDES RAMP CLOSURE PREWARNINGS	INCLUDES RAMP CLOSURE PREWARNINGS INCLUDES RAMP CLOSURE PREWARNINGS INCLUDES RAMP CLOSURE PREWARNINGS	INCLUDES RAMP CLOSURE PREWARNINGS INCLUDES RAMP CLOSURE PREWARNINGS INCLUDES RAMP CLOSURE PREWARNINGS	INCLUDES RAMP CLOSURE PREWARNINGS	INCLUDES RAMP CLOSURE PREWARNINGS	INCLUDES RAMP CLOSURE PREWARNINGS	INCLUDES RAMP CLOSURE PREWARNINGS	INCLUDES RAMP CLOSURE PREWARNINGS	INCLUDES RAMP CLOSURE PREWARNINGS INCLUDES RAMP CLOSURE PREWARNINGS INCLUDES RAMP CLOSURE PREWARNINGS			mmmmm	SHEFT 117
MOVING SIGNS	638.2102 MOVING	NUMBER ON SIGNS PLAN TYPE II 3-14 EACH 3-14 1 10-2 1 TOTAI 2 2000 2000		CATEGORY 0010 SPV.0045.01 PORTABLE CHANGEABLE MESSAGE SIGN DAY	14		44 15		29	12	0 m g	5 13	0 9 9	5 46 13	47 19 10	534		· · · · · · · · · · · · · · · · · · ·	
	GROUP STATION LOCATION CODE STATION LOCATION 010 261-401EB RT 467-401EB RT			CATEGORY 0010 643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	1 1	5 0 0 0 <u>5</u>	98 7 0 0 9	. 8 3 8 5	t 24 24 24 24 24		ৰ ৰ ৰ (2 20 18	4 4 4	20 20	20 21	742		· · · · · · · · ·	OLIANTITIES
				CATEGORY 0010 643.0900 TRAFFIC CONTROL SIGNS DAY	1 883	481 1638 87	178 92 198	164 87 90 80	22 131 96	141 356	90 187	/9 182 128	90 150	79 182 128	144 162 120	5,113		· · · · · · · · · · · · · · · · · · ·	MISCELL ANEDLIS OLIANTITIES
	RRS N BRIDGE N BRIDGE N BRIDGE N BRIDGE	GN BRIDGE GN BRIDGE	CATEGORY 0010 CATEGORY 0010 643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	1 68	2 8 5 7 0	0 0 0 <u>6</u>	: 22 99 %	o (co ∞ 4	21 45	∞ Ç Ź I	o 15 D	8 11 2	9 19 19	9 1 4	415		mm		
	l REMARKS	MOUNT ON EXISTING SIGN BRIDGE MOUNT ON EXISTING SIGN BRIDGE MOUNT ON EXISTING SIGN BRIDGE MOUNT ON EXISTING SIGN BRIDGE	MOUNT ON EXISTING SIGN BRIDGE MOUNT ON EXISTING SIGN BRIDGE	L CATEGORY 0010 643.0715 B43.0715 FRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	I \$05	200 52 126 109	181 52 130	1256 1819 1819	88 88 88	182 520	52 153	راء 218 121	52 104 153	75 218 121	134 140 104	4,775			V• DANE
	(637.0402) SIGNS REFLECTIVE FOLDING TYPE II SF	10 10 10 10 10 10	0 10 20	CATEGORY 0010 643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	1 15	99 99 	16 16 16	6 28 28	6 18	1 00	444	2 22	4 4 4	4 22 22	22 8 4	388			
SIGNS REFLECTIVE FOLDING TYPE II	LOCATION	SB 151 to NB 139 On Ramp NB 151 to NB 139 On Ramp SB 151 to SB 139 On Ramp NB 151 to SB 139 On Ramp NB 151 to SB 139 On Ramp	NB High Crossing Blvd to SB 139 On Ramp SB High Crossing Blvd to SB 139 On Ramp Torixi	CATEGORY 0010 643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY DAY	Ι ∞ ξ	52 332 193	70 15 42	24 0 19 24 0 19 24	53 88 43 3	28 48	19 48 88	12 56 36	19 48 48	56 56 36	32 61 63	1,340	SH 51 RAMP EXTENSIONS	mm	30
	SIGN PLATE NO.	R11-54F R11-54F R11-54F R11-54F	R11-54F R11-54F	CATEGORY 0010 643.0300 TRAFFIC CONTROL DRUMS DAY	330	2,300 850 850 445	750 455 385 650	650 445 750 855	895 830 830	730 2,450	470 630 985	890 535 00 50 50 50 50 50 50 50 50 50 50 50 50	470 630 985	535 990 535	485 1,015 925	25,555	INCLUDES CONCRETE CURB WORK (INCLUDING CURE TIME) AND USH 51 RAMP EXTENSIONS		HWV•IH
	RAMP GATE NO.	: 613-17 613-18 613-19 613-20	OSSING BLVD: G13-21 G13-21	LENGTH CALENDAR DAYS	7 4 7	24040	0 m 4 m	9 01 02 07) (n <i>4</i> (1	7 24 *	444	- 4 ∩	4 4 4	- 4 m	640	TOTAL	NCRETE CURB WORK (INC		
	GROUP CODE SIGN NO.	139/90/94 & USH 151: NG10 RG-2 RG-3 RG-3 RG-4	139/90/94 & HIGH CROSSING BLVD: RG-5 G13-21 RG-6 G13-21	STAGE	PREWARNING EASTBOUND STAGE 1A	STAGE 24 STAGE 24 STAGE 28 STAGE 20 STAGE 20	STAGE 2E STAGE 2F STAGE 3A STAGE 3B	STAGE 3C STAGE 3D STAGE 3D STAGE 3E	STAGE 4A STAGE 4B STAGE 4C	WESTBOUND STAGE 1A STAGE 1B	STAGE 2A STAGE 2B STAGE 2C	STAGE 2E STAGE 2E STAGE 2F	STAGE 3A STAGE 3B STAGE 3C	STAGE 3D STAGE 3E STAGE 3F	STAGE 4A STAGE 4B STAGE 4C		* INCLUDES COI	~~~~~	PPO IECT NO-1010-00-72



Wisconsin Department of Transportation PAGE: 6 DATE: 10/24/12 SCHEDULE OF ITEMS

REVISED:

CON	ΓI	RA	C	'T	:			
-	-					-	-	

PROJECT(S): FEDERAL ID(S): 1010-00-72 WISC 201260 20121113002 WISC 2012600 CONTRACTOR :_ _____ ITEM APPROX. | UNIT PRICE | BID AMOUNT LINE |-----|-----|------NO DESCRIPTION 636.0500 SIGN SUPPORTS | | 414.000| |LB 0550 STEEL REINFORCEMENT _ _ _ _ _____ _ _ _ _ _ _ _ _ _ _ _ _ _ 637.0101 SIGNS TYPE I 2,167.000 05601 SF 637.0202 SIGNS | 898.000| |SF | 0570 REFLECTIVE TYPE II ------_____ 637.0402 SIGNS 60.000 SF 0580 REFLECTIVE FOLDING TYPE |II| . 638.2102 MOVING SIGNS 0590 TYPE II 2.000 EACH . _____ -----638.2601 REMOVING SIGNS 0600|TYPE I 18.000 EACH | . _____ _____ 638.2602 REMOVING SIGNS 147.000| 0610 TYPE II EACH _____ 638.3000 REMOVING SMALL 107.000 0620 SIGN SUPPORTS EACH . _____ _____ _ _ _ _ 638.3100 REMOVING 6.000 EACH 0630 STRUCTURAL STEEL SIGN SUPPORTS -----638.3620 ERECTING STATE 0640 OWNED SIGNS TYPE II 167.000| EACH _ 638.4000 MOVING SMALL 2.000 0650 SIGN SUPPORTS EACH

Wisconsin Department of Transportation PAGE: 7 DATE: 10/24/12 SCHEDULE OF ITEMS REVISED: SCHEDULE OF ITEMS

WISC 2012600

PROJECT(S): FEDERAL ID(S): 1010-00-72 WISC 201260

CONTRACT: 20121113002

CONTRA	ACTOR :					
LINE	1	APPROX.	UNIT PRICE	BID AMOUNT		
NO	DESCRIPTION	QUANTITY AND UNITS	 DOLLARS CTS	DOLLARS CTS		
	642.5401 FIELD OFFICE TYPE D	 1.000 EACH	 .	 .		
0670	643.0100 TRAFFIC CONTROL (PROJECT) 01. 1010-00-72	 1.000 EACH	 .	 .		
0680	643.0300 TRAFFIC CONTROL DRUMS	25,555.000 DAY	 .	 .		
	643.0420 TRAFFIC CONTROL BARRICADES TYPE III	 1,340.000 DAY		 		
	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A	 388.000 DAY	 .	 .		
	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C	 4,775.000 DAY	 .	 .		
	643.0800 TRAFFIC CONTROL ARROW BOARDS	 415.000 DAY	 .	 		
	643.0900 TRAFFIC CONTROL SIGNS	 5,113.000 DAY	 .	 .		
	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II	 742.000 EACH	 .	 		
	646.0106 PAVEMENT MARKING EPOXY 4-INCH	 51,750.000 LF	 .	 		
	646.0406 PAVEMENT MARKING SAME DAY EPOXY 4-INCH	 52,500.000 LF	 .	 .		
Wisconsin Department of Transportation PAGE: 12 DATE: 10/24/12 SCHEDULE OF ITEMS REVISED: SCHEDULE OF ITEMS

WISC 2012600

PROJECT(S): FEDERAL ID(S): 1010-00-72 WISC 201260

1010-00-72

CONTRACT: 20121113002

CONTRACTOR :				
LINE NO		APPROX.	UNIT PRICE	
	SPV.0060 SPECIAL 11. GROUND ROD	AND UNITS 1.000 EACH	DOLLARS CIS	DOLLARS CTS
	SPV.0060 SPECIAL 12. GROUNDING PULL BOX	 16.000 EACH		
	SPV.0090 SPECIAL 01. REMOVING HMA PAVEMENT TAPERED & NOTCHED LONGITUDINAL JOINTS MILLING	441,000.000		
	SPV.0090 SPECIAL 02. CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A SPECIAL	 3,950.000 LF 		
1220	SPV.0090 SPECIAL 03. SAWING CONCRETE PARTIAL SAWCUT	 1,270.000 LF		
1230	SPV.0180 SPECIAL 01. MILLING & ASPHALT FILL CRACK TREATMENT	200.000 SY		
	SPV.0180 SPECIAL 02. CONTINUOUSLY REINFORCED CONCRETE PAVEMENT SHES REPAIR	1,250.000 SY		
	SPV.0060 SPECIAL 13. SHORTEN STRUCTURAL STEEL SIGN SUPPORT	2.000 EACH		
	SECTION 0001 TOTAL			
	 TOTAL BID			·



October 29, 2012

Division of Transportation Systems Development Bureau of Project Development 4802 Sheboygan Avenue, Rm 601 P O Box 7916 Madison, WI 53707-7916

Telephone: (608) 266-1631 Facsimile (FAX): (608) 266-8459

NOTICE TO ALL CONTRACTORS:

Federal Wage Rate Addendum #1

Letting of November 13, 2012

Attached are copies of the revised U.S. Department of Labor Wage Rates that are effective for many proposals in the November 13, 2012 letting. The first 13 pages of the attachment are the first page of the county highway wage sheets (Page 1 of 3) and correspond to the affected proposal's county. The last two pages of the attachment are pages 2 and 3 of the highway wage sheets, which are the same for all counties.

The following proposals and counties are affected in the November 13, 2012 letting:

02 Dane	12 Adams
03 Richland	13 Waushara
04 Vernon	14 Wood
05 Milwaukee	15 St. Croix
07 Racine	16 Dunn
08 Sheboygan	17 St. Croix/Dunn
10 Sheboygan	19 Pierce
11 Winnebago	

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractors.

Sincerely,

Terry Lammert

Proposal Development Specialist Proposal Management Section

STATE: Wisconsin DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORE	RS CLASSIFICATION:	Basic Hourly Rates	Fringe <u>Benefits</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 (Shovele Loader, Utility Man); Batch Truck Dumper; or Cement I Bituminous Worker; (Dumper, Ironer, Smoother, Tampe	Handler;	
	Concrete Handler	\$26.92	13.45
Group 2:	Air Tool Operator; Joint Sawer and Filler (Pavement);		
	Vibrator or Tamper Operator (Mechanical Hand Operate	ed);27.02	13.45
Group 3:	Bituminous Worker (Raker and Luteman); Formsetter		
	(Curb, Sidewalk, and Pavement); Strike Off man		13.45
Group 4:	Line and Grade Specialist		13.45
Group 5:	Blaster and Powderman		13.45
Group 6:	Flagperson; Traffic Control		13.45

CLASSES OF LABORER AND MECHANICS

Bricklayer Carpenter Millwright Piledriverman Ironworker Cement Mason/Concrete Finisher	30.56 32.16 31.06 31.25 31.52	14.81 14.81 14.81 19.48
Electrician	See Page 3	
Line Construction	-	
Lineman		18.00
Heavy Equipment Operator		16.71
Equipment Operator		14.63
Heavy Groundman Driver		14.11
Light Groundman Driver		13.45
Groundsman		12.16
Painters		
Well Drilling:		
Well Driller		3.70

DATE: September 28, 2012

	Basic Hourly Rates	Fringe Benefits
Truck Drivers:		
1 & 2 Axles		
Three or More Axles; Euclids, Dumptor &		
Articulated, Truck Mechanic		17.13

STATE: Wisconsin

DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

		Basic Hourly	Fringe
LABORE	RS CLASSIFICATION:	Rates	<u>Benefits</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 (Shovel	er,	
	Loader, Utility Man); Batch Truck Dumper; or Cement	Handler;	
	Bituminous Worker; (Dumper, Ironer, Smoother, Tamp	er);	
	Concrete Handler	\$27.20	13.45
Group 2:	Air Tool Operator; Joint Sawer and Filler (Pavement);		
	Vibrator or Tamper Operator (Mechanical Hand Operat	ed);	
	Chain Saw Operator; Demolition Burning Torch Labore	er	13.45
Group 3:	Bituminous Worker (Raker and Luteman); Formsetter		
	(Curb, Sidewalk, and Pavement); Strike Off man		13.45
Group 4:	Line and Grade Specialist		13.45
Group 5:	Blaster and Powderman		13.45
Group 6:	Flagperson and Traffic Control Person		13.45

DATE: S	eptember	28,	2012
---------	----------	-----	------

Truck Drivers:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
1 & 2 Axles		
Three or More Axles; Euclids, Dumptor &		
Articulated, Truck Mechanic		17.13

CLASSES OF LABORER AND MECHANICS

Bricklayer	
Carpenter	 14.81
Millwright	
Piledriverman	
Ironworker	
Cement Mason/Concrete Finisher	
Electrician	 See Page 3
Line Construction	0
Lineman	
Heavy Equipment Operator	
Equipment Operator	
Heavy Groundman Driver	
Light Groundman Driver	
Groundsman	
Painter, Brush	
Painter, Spray, Structural Steel, Bridges	
Well Drilling:	
Well Driller	 3.70

STATE: Wisconsin DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORE	RS CLASSIFICATION:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</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 (Shovele Loader, Utility Man); Batch Truck Dumper; or Cement H Bituminous Worker; (Dumper, Ironer, Smoother, Tampe	landler;	
	Concrete Handler	\$26.92	13.45
Group 2:			
	Vibrator or Tamper Operator (Mechanical Hand Operate	ed);27.02	13.45
Group 3:	Bituminous Worker (Raker and Luteman); Formsetter		
	(Curb, Sidewalk, and Pavement); Strike Off man		13.45
Group 4:	Line and Grade Specialist		13.45
Group 5:	Blaster and Powderman		13.45
Group 6:	Flagperson; Traffic Control		13.45

CLASSES OF LABORER AND MECHANICS

B : !!	aa /a	
Bricklayer		16.97
Carpenter		14.81
Millwright		
Piledriverman		14.81
Ironworker		21.20
Cement Mason/Concrete Finisher		16.30
Electrician		
Line Construction		
Lineman		18.00
Heavy Equipment Operator		16.71
Equipment Operator		15.41
Heavy Groundman Driver		
Light Groundman Driver		
Groundsman		
Painters		
Well Drilling:		
Wel Driller		3.70

DATE: September 28, 2012

Truck Drivers:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
1 & 2 Axles		
Three or More Axles; Euclids, Dumptor &		
Articulated, Truck Mechanic		17.13

STATE: Wisconsin

DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

		Basic Hourly	Fringe
LABORE	RS CLASSIFICATION:	Rates	Benefits
Group 1:	General Laborer; Tree Trimmer; Conduit Layer;		
	Demolition and Wrecking Laborer; Guard Rail, Fence		
	and Bridge Builder; Landscaper, Multiplate Culvert		
	Assembler; Stone Handler; Bituminous Worker (Shovel	er,	
	Loader, Utility Man); Batch Truck Dumper; or Cement	Handler;	
	Bituminous Worker; (Dumper, Ironer, Smoother, Tamp	er);	
	Concrete Handler	\$24.34	16.74
Group 2:	Air Tool Operator; Joint Sawer and Filler (Pavement);		
	Vibrator or Tamper Operator (Mechanical Hand Operat	ed);	
	Chain Saw Operator; Demolition Burning Torch Labore	£	16.74
Group 3:	Bituminous Worker (Raker and Luteman); Formsetter		
	(Curb, Sidewalk, and Pavement); Strike Off man		16.74
Group 4:	Line and Grade Specialist		16.74
Group 5:	Blaster and Powderman		16.74
Group 6:	Flagperson traffic control person		16.74

DATE: September 28, 2012

Truck Drivers:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
1 & 2 Axles		
Three or More Axles; Euclids, Dumptor &		
Articulated, Truck Mechanic		17.13

CLASSES OF LABORER AND MECHANICS

Bricklayer	 16.07
Carpenter	 14.41
Piledriverman	
Ironworker	
Cement Mason/Concrete Finisher	 17.53
Electrician	 See Page 3
LineConstruction	-
Lineman	
Heavy Equipment Operator	 16.71
Equipment Operator	 15.41
Heavy Groundman Driver	 14.11
Light Groundman Driver	 13.45
Groundsman	 12.16
Millwrights	
Painter, Brush	
Painter, Spray and Sandblaster	
Painter, Bridge	
Well Drilling:	
Well Driller	 3.70

STATE: Wisconsin DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

	Basic Hourly	Fringe
LABORERS CLASSIFICATION:	Rates	Benefits
Group 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, and Bridge Builder; Landscaper, Multiplate Cul Assembler; Stone Handler; Bituminous Worker Loader, Utility Man); Batch Truck Dumper; or Bituminous Worker; (Dumper, Ironer, Smoother	Fence Ivert (Shoveler, Cement Handler;	
Concrete Handler	\$26.92	13.45
Group 2: Air Tool Operator; Joint Sawer and Filler (Pave		
Vibrator or Tamper Operator (Mechanical Hand	d Operated);27.02	13.45
Group 3: Bituminous Worker (Raker and Luteman); Forr	nsetter	
(Curb, Sidewalk, and Pavement); Strike Off ma	n27.07	13.45
Group 4: Line and Grade Specialist		13.45
Group 5: Blaster and Powderman		13.45
Group 6: Flagperson; Traffic Control		13.45

DATE: September	28, 2012
-----------------	----------

Truck Drivers:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
1 & 2 Axles		
Three or More Axles; Euclids, Dumptor &		
Articulated, Truck Mechanic		17.13

CLASSES OF LABORER AND MECHANICS

Bricklayer	30.42	
Carpenter (W. of Hwy. 29)		••••••
Piledriverman (W. of Hwy. 29)		
Carpenter (E. of Hwys. 29 & 65)		
Millwright (E. of Hwys. 29 & 65)		
Piledriverman (E. Hwys. 29 & 65)		
Ironworker		
Cement Mason/Concrete Finisher		
Electrician		See Page 3
Line Construction		Ū
Lineman		18.00
Heavy Equipment Operator		16.71
Equipment Operator		
Heavy Groundman Driver		14.11
Light Groundman Driver		13.45
Groundsman		
Painters		
Well Drilling:		
Well Driller		3.70

STATE: Wisconsin

DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

		Basic Hourly	Fringe
LABORE	RS CLASSIFICATION:	Rates	<u>Benefits</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 (Shove	er,	
	Loader, Utility Man); Batch Truck Dumper; or Cement	Handler;	
	Bituminous Worker; (Dumper, Ironer, Smoother, Tamp	er);	
	Concrete Handler	\$22.65	17.49
Group 2:	Air Tool Operator; Joint Sawer and Filler (Pavement);		
	Vibrator or Tamper Operator (Mechanical Hand Operat	ed);	
	Chain Saw Operator; Demolition Burning Torch Labore	er	17.49
Group 3:	Bituminous Worker (Raker and Luteman); Formsetter		
	(Curb, Sidewalk, and Pavement); Strike Off man		17.49
Group 4:	Line and Grade Specialist		17.49
Group 5:	Blaster and Powderman		17.49
Group 6:	Flagman; traffic control person		17.49

DATE: September 28, 2012

Truck Drivers:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
1 & 2 Axles		
Three or More Axles; Euclids, Dumptor &		
Articulated, Truck Mechanic		17.13

CLASSES OF LABORER AND MECHANICS

Bricklayer Pledriverman Carpenter Ironworker	 19.46 14.41
Cement Mason/Concrete Finisher	
Electrician	 See Page 3
LineConstruction	
Lineman	
Heavy Equipment Operator	 16.71
Equipment Operator	
Heavy Groundman Driver	 14.11
Light Groundman Driver	 13.45
Groundsman	
Millwrights (E. of Hwy 75)	 13.78
Millwrights (W. of Hwy 75)	
Painter, Brush, Roller	 17.04
Painter, Spray and Sandblaster	 17.04
Painter, Steel	 4.80
Well Drilling:	
Well Driller	 3.70

STATE: Wisconsin DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

	Basic Hourly	Fringe
LABORERS CLASSIFICATION:	Rates	Benefits
Group 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fe and Bridge Builder; Landscaper, Multiplate Culve Assembler; Stone Handler; Bituminous Worker (S Loader, Utility Man); Batch Truck Dumper; or Ce Bituminous Worker; (Dumper, Ironer, Smoother,	rt Shoveler, ment Handler;	
Concrete Handler	\$26.92	13.45
Group 2: Air Tool Operator; Joint Sawer and Filler (Paveme	ent);	
Vibrator or Tamper Operator (Mechanical Hand C	Operated);27.02	13.45
Group 3: Bituminous Worker (Raker and Luteman); Forms	etter	
(Curb, Sidewalk, and Pavement); Strike Off man.		13.45
Group 4: Line and Grade Specialist		13.45
Group 5: Blaster and Powderman		13.45
Group 6: Flagperson; Traffic Control		13.45

DATE: September	28,	2012
-----------------	-----	------

Truck Drivers:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
1 & 2 Axles		
Three or More Axles; Euclids, Dumptor &		
Articulated, Truck Mechanic		17.13

CLASSES OF LABORER AND MECHANICS

Bricklayer	28/11	
Carpenter		
Millwright		
Piledriverman		
Ironworker		19.48
Cement Mason/Concrete Finisher		
Electrician		See Page 3
Line Construction		
Lineman		18.00
Heavy Equipment Operator		16.71
Equipment Operator		15.41
Heavy Groundman Driver		14.11
Light Groundman Driver		
Groundsman		
Painter, Brush		
Painter, Spray, Structural Steel, Bridges		16.27
Well Drilling:		
Well Driller		3.70

STATE: Wisconsin DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DECOR		Basic Hourly	Fringe
LABORE	RS CLASSIFICATION:	Rates	Benefits
Group 1:	General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence and Bridge Builder; Landscaper, Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shovele Loader, Utility Man); Batch Truck Dumper; or Cement I Bituminous Worker; (Dumper, Ironer, Smoother, Tampe	Handler;	
	Concrete Handler	\$26.92	13.45
Group 2:	Air Tool Operator; Joint Sawer and Filler (Pavement);		
	Vibrator or Tamper Operator (Mechanical Hand Operate	ed);27.02	13.45
Group 3:	Bituminous Worker (Raker and Luteman); Formsetter		
	(Curb, Sidewalk, and Pavement); Strike Off man		13.45
Group 4:	Line and Grade Specialist		13.45
Group 5:	Blaster and Powderman		13.45
Group 6:	Flagperson; Traffic Control		13.45
Group 6:	Flagperson; Traffic Control		13.45

DATE:	September	28, 2012
-------	-----------	----------

Truck Drivers:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
1 & 2 Axles		
Three or More Axles; Euclids, Dumptor &		
Articulated, Truck Mechanic		17.13

CLASSES OF LABORER AND MECHANICS

Bricklaver	30 77	
Carpenter	••••	
Millwright		
Piledriverman		14.81
Ironworker		
Cement Mason/Concrete Finisher		16.30
Electrician		
Line Construction		-
Lineman		
Heavy Equipment Operator		16.71
Equipment Operator		15.41
Heavy Groundman Driver		
Light Groundman Driver		
Groundsman		12.16
Painters		11.52
Well Drilling:		
Well Driller		

STATE: Wisconsin DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORE	RS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits
Group 1:	General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence and Bridge Builder; Landscaper, Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shovele Loader, Utility Man); Batch Truck Dumper; or Cement H Bituminous Worker; (Dumper, Ironer, Smoother, Tampe	Handler;	
	Concrete Handler	\$26.92	13.45
Group 2:	Air Tool Operator; Joint Sawer and Filler (Pavement);		
	Vibrator or Tamper Operator (Mechanical Hand Operate	ed);27.02	13.45
Group 3:	Bituminous Worker (Raker and Luteman); Formsetter		
	(Curb, Sidewalk, and Pavement); Strike Off man		13.45
Group 4:	Line and Grade Specialist		13.45
Group 5:	Blaster and Powderman		13.45
Group 6:	Flagperson; Traffic Control		13.45

CLASSES OF LABORER AND MECHANICS

Bricklayer	
Carpenter (W. of Hwy. 65)	 11.61
Piledriverman (W. of Hwy. 65)	
Carpenter (E. of Hwy. 65)	 14.81
Millwright (E. of Hwy. 65)	 14.81
Piledriverman (E. of Hwy. 65)	 14.81
Ironworker	
Cement Mason/Concrete Finisher	
Electrician	 See Page 3
Line Construction	-
Lineman	
Heavy Equipment Operator	 16.71
Equipment Operator	 15.41
Heavy Groundman Driver	
Light Groundman Driver	 13.45
Groundsman	 12.16
Painters	
Well Drilling:	
Wel Driller	

Truck Drivers:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
1 & 2 Axles		
Three or More Axles; Euclids, Dumptor & Articulated, Truck Mechanic		

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 March 12, 2010; Modification 1, dated March 19, 2010; Modification 2, dated June 4, 2010; Modification 3, dated July 2, 2010; Modification 4, dated August 6, 2010; Modification 5, dated September 3, 2010; Modification 6, dated October 1, 2010, Modification 7, dated November 5, 2010; Modification 8; dated November 15, 2010; Modification 9, dated January 7, 2011; Modification #10 dated February 11, 2011; Modification #11 dated May 6, 2011; Modification #12 dated May 13, 2011; Modification #13 dated June 3, 2011; Modification #14 dated July 29, 2011; Modification #15 dated August 12, 2011; Modification #16 dated August 26, 2011; Modification #17 dated September 16, 2011; Modification #18 dated October 14, 2011; Modification #19 dated November 11, 2011; Modification #0, dated January 6, 2012; Modification #1 dated January 13, 2012; Modification #2 dated February 3, 2012; Modification #3 dated February 10, 2012; Modification #4 dated March 2, 2012; Modification #5 dated May 4, 2012; Modification #6 dated May 11, 2012; Modification #7 dated June 1, 2012; Modification #8 dated June 15, 2012; Modification #9 dated July 6, 2012; Modification #10 dated August 3, 2012; Modification #11 dated August 31, 2012; Modification #12 dated September 28, 2012.

DATE: September 28, 2012

STATE: Wisconsin DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

	Basic Hourly	Fringe
LABORERS CLASSIFICATION:	Rates	Benefits
Group 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fe and Bridge Builder; Landscaper, Multiplate Culver Assembler; Stone Handler; Bituminous Worker (St Loader, Utility Man); Batch Truck Dumper; or Cer Bituminous Worker; (Dumper, Ironer, Smoother, T	t noveler, nent Handler;	
Concrete Handler	\$26.92	13.45
Group 2: Air Tool Operator; Joint Sawer and Filler (Paveme	nt);	
Vibrator or Tamper Operator (Mechanical Hand O	perated);27.02	13.45
Group 3: Bituminous Worker (Raker and Luteman); Formse	tter	
(Curb, Sidewalk, and Pavement); Strike Off man		13.45
Group 4: Line and Grade Specialist		13.45
Group 5: Blaster and Powderman		13.45
Group 6: Flagperson; Traffic Control		13.45

DATE: September	28, 2012
-----------------	----------

Truck Drivers:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
1 & 2 Axles		
Three or More Axles; Euclids, Dumptor &		
Articulated, Truck Mechanic		17.13

CLASSES OF LABORER AND MECHANICS

Bricklayer	 17.19 14.81
Millwright	
Piledriverman	
Ironworker	 19.48
Cement Mason/Concrete Finisher	
Electrician	 See Page 3
Line Construction	-
Lineman	 18.00
Heavy Equipment Operator	 16.71
Equipment Operator	 15.41
Heavy Groundman Driver	 14.11
Light Groundman Driver	 13.45
Groundsman	 12.16
Painters	 10.40
Well Drilling:	
Well Driller	 3.70

STATE: Wisconsin DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: September	28, 2012
-----------------	----------

Truck Drivers:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
1 & 2 Axles		
Three or More Axles; Euclids, Dumptor &		
Articulated, Truck Mechanic		17.13

CLASSES OF LABORER AND MECHANICS

Bricklayer	26.78	
Carpenter		
Millwright		14.81
Piledriverman		
Ironworker		19.48
Cement Mason/Concrete Finisher		16.30
Electrician		See Page 3
Line Construction		-
Lineman		18.00
Heavy Equipment Operator		16.71
Equipment Operator		15.41
Heavy Groundman Driver		
Light Groundman Driver		
Groundsman		
Painters		11.52
Well Drilling:		
Well Driller		3.70

STATE: Wisconsin DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORERS CLASSIFICATION:		Basic Hourly <u>Rates</u>	Fringe Benefits
Group 1:	General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence and Bridge Builder; Landscaper, Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shovele Loader, Utility Man); Batch Truck Dumper; or Cement H Bituminous Worker; (Dumper, Ironer, Smoother, Tampe	Handler;	
	Concrete Handler	\$26.92	13.45
Group 2:	Air Tool Operator; Joint Sawer and Filler (Pavement);		
	Vibrator or Tamper Operator (Mechanical Hand Operate	ed);27.02	13.45
Group 3:	Bituminous Worker (Raker and Luteman); Formsetter		
	(Curb, Sidewalk, and Pavement); Strike Off man		13.45
Group 4:	Line and Grade Specialist		13.45
Group 5:	Blaster and Powderman		13.45
Group 6:	Flagperson; Traffic Control		13.45

DATE: September 28, 2012

Truck Drivers:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
1 & 2 Axles		
Three or More Axles; Euclids, Dumptor &		
Articulated, Truck Mechanic		17.13

CLASSES OF LABORER AND MECHANICS

Bricklayer	26.78	
Carpenter		
Millwright		
Piledriverman		
Ironworker		
Cement Mason/Concrete Finisher		
Electrician		
Line Construction		
Lineman		
Heavy Equipment Operator		16.71
Equipment Operator		
Heavy Groundman Driver		
Light Groundman Driver		
Groundsman		
Painters	23.37	
Well Drilling:		
Well Driller	16 52	3 70
Wai Dillia		

STATE: Wisconsin DECISION NUMBER: W1080010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORE	RS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits
		1 takeo	Dalante
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 (Shovele Loader, Utility Man); Batch Truck Dumper; or Cement H Bituminous Worker; (Dumper, Ironer, Smoother, Tampe	Handler;	
	Concrete Handler	\$26.92	13.45
Group 2:	Air Tool Operator; Joint Sawer and Filler (Pavement);		
	Vibrator or Tamper Operator (Mechanical Hand Operate	ed);27.02	13.45
Group 3:	Bituminous Worker (Raker and Luteman); Formsetter		
	(Curb, Sidewalk, and Pavement); Strike Off man		13.45
Group 4:	Line and Grade Specialist		13.45
Group 5:	Blaster and Powderman		13.45
Group 6:	Flagperson; Traffic Control		13.45

CLASSES OF LABORER AND MECHANICS

Bricklayer	
Carpenter	
Millwright	 14.81
Piledriverman	 14.81
Ironworker	 19.48
Cement Mason/Concrete Finisher	 16.30
Electrician	 See Page 3
Line Construction	Ū
Lineman	 18.00
Heavy Equipment Operator	 16.71
Equipment Operator	
Heavy Groundman Driver	 14.11
Light Groundman Driver	
Groundsman	
Painters	 11.52
Well Drilling:	
Well Driller	 3.70

DATE: September 28, 2012

Truck Drivers:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
1 & 2 Axles		
Three or More Axles; Euclids, Dumptor & Articulated, Truck Mechanic		

	N NUMBER: W1080010 TION OF WORK: Highways and Airport Runway ar	nd Taxiway Construct	ion		DATE: S	eptember 28, 2012
POWER E	EQUIPMENT OPERATORS CLASSIFICATION:	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>	POWER EQUIPMENT OPERATORS CLASSIFICATION: (Continued)	Basic Hourly <u>Rates</u>	Fringe <u>Benefits</u>
	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	. \$35.22	\$19.65	(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); tuger; bacters; unsher and A former; bot		
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	. \$34.72	\$19.65	tugger; boatmen; winches and A-frames; post driver; material hoist operator 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	\$34.22	\$19.65
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			machine; tractor, endloader (rubber tired) - light; jeep digger; fork lift; mulcher; launch operator; fireman; environmental burner.		\$19.65
	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;			Group 5: Air compressor; power pack; vibratory hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; concrete pro- portioning plants generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; oiler; pump (over 3 inches);		\$19.65
	asphalt plant engineer; bituminous paver; bump cutter and grooving machine; milling machine; screed (bituminous paver); asphalt heater,			drilling machine helper Group 6: Off – road material hauler with or without eject		\$19.65
	planer and scarifier; backhoes (excavators) having a manufacturers rated capacity of under 3 cu. yds.; grader or motor patrol; tractor			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		

STATE: Wisconsin

DECISION NUMBER: W1080010



November 5, 2012

Division of Transportation Systems Development Bureau of Project Development 4802 Sheboygan Avenue, Rm 601 P O Box 7916

Telephone: (608) 266-1631 Facsimile (FAX): (608) 266-8459

Madison, WI 53707-7916

NOTICE TO ALL CONTRACTORS:

Proposal #02: 1010-00-72, Federal ID WISC 2012 600 Madison – Lake Delton Road (Lien Road – USH 51) IH 39 Dane County

Letting of November 13, 2012

This is Addendum No. 2, which provides for the following:

Special Provisions

Added Special Provisions				
Article No.	Description			
43	Pavement Marking Epoxy 4-Inch			

Schedule of Items

Revised Bid Item Quantities							
Bid Item	Itom Description	Unit	Old	Revised	Proposal		
Did item	Item Description		Quantity	Quantity	Total		
646.0106	Pavement Marking Epoxy 4-inch	LF	51,750	104,250	104,250		

Deleted Bid Item Quantities								
Bid Item	Itom Description	Unit	Old	Revised	Proposal			
Diu item	Item Description		Quantity	Quantity	Total			
646.0406	Pavement Marking Same Day Epoxy 4-inch	LF	52,500	0	0			
an Shoots								

Plan Sheets

	Revised Plan Sheets				
Plan	Plan Sheet Title (brief description of changes to sheet)				
Sheet	Fian Sheet The (bhei description of changes to sheet)				
118	Miscellaneous Quantities (Revised quantities Pavement Marking Epoxy 4-inch and removed				
110	Pavement Marking Same Day Epoxy 4-inch)				

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Terry Lammert

Proposal Development Specialist Proposal Management Section

ADDENDUM NO. 2 1010-00-72 November 5, 2012

Special Provisions

43. Pavement Marking Epoxy 4-Inch.

This work shall be in accordance with the pertinent requirements of section 646 of the standard specifications, except that it shall also conform to the requirements of section 646.3.1.3 to apply edge lines on the same day the upper layer is placed.

Schedule of Items

Attached, dated November 5, 2012, are the revised Schedule of Items Pages 7-12.

Plan Sheets

The following $8\frac{1}{2} \times 11$ -inch sheet is attached and made part of the plans for this proposal: Revised: 118.

END OF ADDENDUM

				F	Addendum D 1010-00- Revised Sh	72 eet 118
660.000 TEMPORARY PAURIENT MARKING PAURIENT MARKING ERELECTIVE PANT 4 MOH 15,000 13,500 13,500	17,900			1	November 1	I <u>, 2012</u>
BAL DATA BALEMENT MARKING DAZONAL DECOVY 24 HICH L L L L L L L L L L L L L L L L L L L	08	660,6900 CONSTRUCTION STMMIG STMMIG STMMIG STMMIG 44,170 	44 170		T REPAR MOVALS	
646.0891.5 PAVENEWT MARKING RECONCEWET REFECTIVE THRE 4-MCH ane Line) UN LEF (Mide Deshed Line') 255 00 255 00 1500 1515	28.915	660.090 CONSTRUCTION STANNIG SUPPLEMENAL CONTROL LS I	-	REMARKS	BASE PATCHING CONCRETE BASE PATCHING CONCRETE CONTINUOUSI'N ERENCORCED PANELIKEN REPAR CONCRETE MEDIAN SLOPED NOGE REMOVILS	
S RKING TINE TINE TINE TE Montee Destruction TE Montee Leve Laree Line TE Montee		669,000 CONSTRUCTION STANNIG RESURFACING UF 55,500	22 200	SPV.0090.03 SAMING CONCRETE PARTIAL SAWICUT LF		1,270
PAVEMENT JAKBONG ITEAIS 646.0073.5 PAVEMENT MARGING TAPE SURCH TAPE SURCH TAPE SURCH TAPE SURCH TAPE SURCH E 200 6.200 6.200 6.200 7.2600 6.200	1,2,888	STAKING ITEMS 650.500 CONSTRUCTION STAKING BAGE LF LF 570 570	1,140	SAWING ITEMS 690.0150 690.0250 SAWING SAWING ASPHALT CONCRETE LF LF	5 6 687 5 606 1 319 319 319 319 310 400 210 210	10 8,310
E F (fellow)	کرر	660,4500 CONSTRUCTION STARKIG STARKIG STARKIG STARKIG STARKIG STARKIG STARKIG STARKIG RAMP STO RAMP STO STO	1,140		RAMP RAMP RT RT LT LT RT RT RT RT RT RT RT RT RT RT RT RT RT	7
EE FOXY 4NCH		STA 200-400 ED 64477-65 ED 51A 200-400 ED 61A 21477-65 ED 51A 200-416 ED 61A 215427 EB 51A 201-465 WB TO STA 247-455 WB	TOMA	NOLLES	STA204+51 ED 151A, 215-4215-82 STA204+51 ED 151A, 215-42 STA, 214-66 INT 051A, 316-40 STA, 276-60 INS A14-45 STA, 276-60 INS 051A, 347-46 STA, 276-60 INS 051A, 477-46 STA, 226-60 IS 051A, 477-46 STA, 276-60 IS 051A, 477-46 STA, 476-60 IS 051A, 477-46 STA, 477-46 STA, 476-60 IS 051A, 477-46 STA, 477-477-46 STA, 477-46 STA, 477-477-46 STA, 477-46 STA, 477-477-46 STA, 477-46 STA, 477-477-46 STA, 477-46 STA, 477-477-46 STA, 477-46 STA, 477-477-46 STA, 477-46 STA, 477-477-477-477-477-46 STA, 477-477-477-477-477-477-477-477-477-477	TOTAL
LICCATION LICCATION EB (STAGE 28-25) BB (STAGE 28-25) BB (STAGE 38-25) WB (STAGE 34-25) WB	P400	GROUP CODE 010 S S		GROUP CODE	0:0	
STATION STATION STATION STA204-00 EB TO STA 477-45 EB STA 2004-00 EB TO STA 477-45 EB STA 2004-00 WB TO STA 477-45 EB STA 2004-00 WB TO STA 477-45 EB STA 2004-00 WB TO STA 477-45 EB						
and	• 3 LINE. 9 GAP					

	Wisconsin Department	of Transportation	PAGE:	7
			DATE:	11/05/12
	SCHEDULE OF	ITEMS	REVISED:	
CONTRACT:	PROJECT(S):	FEDERAL ID(S):	
20121113002	1010-00-72	WISC 201	2600	

	ACTOR :						
LINE NO	ITEM DESCRIPTION	1	PPROX. ANTITY	UNIT PR		BID AM	OUNT
NO			D UNITS	DOLLARS		DOLLARS	CTS
	642.5401 FIELD OFFICE TYPE D	 EACH	1.000		•		·
0670	643.0100 TRAFFIC CONTROL (PROJECT) 01. 1010-00-72	 EACH	1.000		•		•
0680	643.0300 TRAFFIC CONTROL DRUMS 	 DAY	25,555.000 		•	 	
	643.0420 TRAFFIC CONTROL BARRICADES TYPE III	 DAY	1,340.000 				
	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A	 DAY	 388.000 				
	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C		 4,775.000 		•		
	643.0800 TRAFFIC CONTROL ARROW BOARDS	 DAY	415.000				
	643.0900 TRAFFIC CONTROL SIGNS	 DAY	5,113.000 				
	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II	 EACH	742.000		•	 	
	646.0106 PAVEMENT MARKING EPOXY 4-INCH 	 1 LF	 04,250.000 		•		
0770	646.0873.S PAVEMENT MARKING WET REFLECTIVE TAPE 8-INCH	 LF	 12,888.000		•		

CONTRACT:

	Wisconsin Departmen	t of Tran	sportati	on	PAGE:	8
					DATE:	11/05/12
	SCHEDULE	OF ITEMS			REVISED:	
CONTRACT:	PROJECT(S):		FEDERAL	ID(S):	:	
20121113002	1010-00-72		WISC	20126	500	

CONTRACTOR	
LUNIKALIUR	•

LINE NO	1	1	PPROX.	UNIT PH	RICE	BID AM	OUNT
NO	DESCRIPTION		QUANTITY - AND UNITS		CTS	DOLLARS	CTS
	646.0881.S PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH 	 LF 	28,915.000	 			
)790	647.0746 PAVEMENT MARKING DIAGONAL EPOXY 24-INCH	 LF	890.000	 			
)800	649.0200 TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH 	 1 LF 	74,900.000	 			
0810	650.4500 CONSTRUCTION STAKING SUBGRADE	 LF	1,140.000	 	•		
)820	650.5000 CONSTRUCTION STAKING BASE 	 LF	1,140.000	 			•
)830	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE	 LF	55,500.000	 			•
)840	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1010-00-72	 LUMP 		 LUMP 			
)850	650.9920 CONSTRUCTION STAKING SLOPE STAKES 	 LF	44,170.000	 	•		•
)860	652.0125 CONDUIT RIGID METALLIC 2-INCH 	 LF	10.000	 	•		•
)870	652.0210 CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH	 LF	115.000		•		•

Wisconsin Department	of Transportation	PAGE: 9
		DATE: 11/05/12
SCHEDULE (F ITEMS	REVISED:
PROJECT(S):	FEDERAL ID(S)	:
1010-00-72	WISC 2012	500

LINE	1	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS
0880	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	 1,370.000 LF		
	652.0605 CONDUIT SPECIAL 2-INCH 	 100.000 LF		
	653.0135 PULL BOXES STEEL 24X36-INCH 	 7.000 EACH		
	653.0140 PULL BOXES STEEL 24X42-INCH 	 5.000 EACH		
	654.0105 CONCRETE BASES TYPE 5	5.000 EACH	-	
	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	 11,210.000 LF		
	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG	 100.000 LF		
	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG 	 300.000 LF		
0960	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. MBHA05	 LUMP 	LUMP	
	656.0500 ELECTRICAL SERVICE BREAKER DISCONNECT BOX (LOCATION) 01. DMS-13-0023	 LUMP 	LUMP	

CONTRACT:

20121113002

	Wisconsin Department	of Transportation	PAGE:	10
			DATE:	11/05/12
	SCHEDULE OF	F ITEMS	REVISED:	
CONTRACT:	PROJECT(S):	FEDERAL ID	(S):	
20121113002	1010-00-72	WISC 2	012600	

LINE		APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS
0980	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	 5.000 EACH		
	659.0802 PLAQUES SEQUENCE IDENTIFICATION	 1.000 EACH		
	670.0100 FIELD SYSTEM INTEGRATOR 	 LUMP 	 LUMP 	
	670.0200 ITS DOCUMENTATION	 LUMP 	 LUMP 	
	673.0225.S INSTALL POLE MOUNTED CABINET	 1.000 EACH	 .	
1030	690.0150 SAWING ASPHALT	 10.000 LF		
1040	690.0250 SAWING CONCRETE	 8,910.000 LF		
1050	ASP.1T0A ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	 550.000 HRS	5.00000	2750.00
1060	ASP.1TOG ON-THE-JOB TRAINING GRADUATE AT \$5. 00/HR	 800.000 HRS	5.00000	4000.00
1070	SPV.0045 SPECIAL 01. PORTABLE CHANGEABLE MESSAGE SIGN	 534.000 DAY	 .	
1080	SPV.0060 SPECIAL 01. RAMP CLOSURE GATES HARDWIRED 32-FT	 1.000 EACH		

Wisconsin Department of Transportation	PAGE: 11
	DATE: 11/05/12
SCHEDULE OF ITEMS	REVISED:
PROJECT(S): FEDERAL ID	(S):

 20121113002
 1010-00-72
 WISC 2012600

CONTRACTOR	:

LINE	ITEM DESCRIPTION	APPROX.	UNIT PRICE	BID AMOUNT	
NO		QUANTITY AND UNITS		DOLLARS CTS	
1090	SPV.0060 SPECIAL 02. RAMP CLOSURE GATES ARMS STOCKPILE 32-FT	 1.000 EACH			
	SPV.0060 SPECIAL 03. RAMP CLOSURE GATES HARDWIRED 26-FT	 2.000 EACH			
	SPV.0060 SPECIAL 04. RAMP CLOSURE GATES HARDWIRED 24-FT	 2.000 EACH			
	SPV.0060 SPECIAL 05. MARKER POSTS FLEXIBLE FOR GUARDRAIL TERMINAL	 13.000 EACH			
	SPV.0060 SPECIAL 06. INSTALL SPREAD SPECTRUM RADIO	 2.000 EACH			
	SPV.0060 SPECIAL 07. INSTALL CABINET MOUNT YAGI ANTENNA	 1.000 EACH			
	SPV.0060 SPECIAL 08. INSTALL POLE MOUNT YAGI ANTENNA	 1.000 EACH			
	SPV.0060 SPECIAL 09. INSTALL GROUND MOUNT DYNAMIC MESSAGE SIGN	 1.000 EACH			
	SPV.0060 SPECIAL 10. INSTALL TERMINAL SERVER 	 1.000 EACH	 .		
	SPV.0060 SPECIAL 11. GROUND ROD 	 1.000 EACH	 .		
	SPV.0060 SPECIAL 12. GROUNDING PULL BOX 	 16.000 EACH	 .		

	Wisconsin Department of	f Transportation	PAGE:	12
			DATE:	11/05/12
	SCHEDULE OF I	ITEMS	REVISED:	
CONTRACT:	PROJECT(S):	FEDERAL ID(S)	:	
20121113002	1010-00-72	WISC 2012	600	

CONTRACTOR :

LINE NO	ITEM DESCRIPTION	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	AND UNITS	1	DOLLARS CTS
1200	SPV.0090 SPECIAL 01. REMOVING HMA PAVEMENT TAPERED & NOTCHED LONGITUDINAL JOINTS MILLING	441,000.000 LF		
1210	SPV.0090 SPECIAL 02. CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A SPECIAL	3,950.000 LF 	 	 .
1220	SPV.0090 SPECIAL 03. SAWING CONCRETE PARTIAL SAWCUT	 1,270.000 LF	 .	 .
1230	SPV.0180 SPECIAL 01. MILLING & ASPHALT FILL CRACK TREATMENT	 200.000 SY		 .
1240	SPV.0180 SPECIAL 02. CONTINUOUSLY REINFORCED CONCRETE PAVEMENT SHES REPAIR	 1,250.000 SY 	 	
1250	SPV.0060 SPECIAL 13. SHORTEN STRUCTURAL STEEL SIGN SUPPORT	 2.000 EACH	 .	 .
	SECTION 0001 TOTAL		 	
	TOTAL BID			

 STATE: Wisconsin
 (DAVIS)

 DECISION NUMBER: W1080010
 DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

 LABORERS CLASSIFICATION:
 Rates
 Benefits

DATE: September 28, 2012

Electricians		
Area 1	\$27.80	16.52
Area 2:		
Electricians	29.13	17.92
Area 3:		
Electrical contracts under \$130,000	26.24	16.85
Electrical contracts over \$130,000	29.41	16.97
Area 4:	28.10	17.24
Area 5	28.61	16.60
Area 6	35.25	19.30
Area 8		
Electricians	30.00	17 76
Area 9:	50.00	17.70
Electricians	32.94	18.71
Area 10	28.97	19.55
Area 11	31.27	23.12
Area 12	32.87	19.22
Area 13	32.20	21.64
	02.20	21.04
Teledata System Installer		
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), GRE	EEN LAKE	
	10	

- Area 1 CALUMET (except township of New Holstein), GREEN LAKE (N. part, including Townships of Berlin, St. Marie and Seneca), MARQUETTE (N. part, including Townships of Crystal Lake, Neshkoro, Newton & Springfield), OUTAGAMIE, WAUPACA, WAUSHARA and WINNEBAGO COUNTIES.
- Area 2 ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Mayville, Colby, Unity, Sherman, Fremont, Lynn and Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST. CROIX, SAWYER, TAYLOR, TREMPEALEAU, VERNON and WASHBURN COUNTIES
- Area 3 FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)

Area4-	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.
Area5-	ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausaukee), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Area North of the townships of Aniwa and Hutchins), VILAS AND WOOD COUNTIES
Area6-	KENOSHA COUNTY
Area 8 -	DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES
Area9-	COLUMBIA, DANE, DODGE, (area west of Hwy. 26, except Chester & Emmet Townships), GREEN LAKE (except townships of Berlin, Seneca and St. Marie), IOWA, MARQUETTE (except townships of Neshkoka, Crystal Lake, Newton and Springfield), and SAUK COUNTIES
Area 10 -	CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOY GAN COUNTIES
Area 11 -	DOUGLAS COUNTY
Area 12 -	RACINE (except Burlington township) COUNTY

- Area 13 MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES
- Area 14 Statewide.
- Area 15 DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES.