HIGHWAY WORK PROPOSAL

Proposal Number:

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

Conditions.

COUNTY STATE PROJECT ID FEDERAL PROJECT ID PROJECT DESCRIPTION HIGHWAY

CTH K IC Crossroad

Racine 1030-11-71 N-S Freeway - CTH K Interchange

IH 94

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

| 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: June 13, 2017 Time (Local Time): 9:00 AM | SAMPLE |
| Contract Completion Time | NOT FOR BIDDING PURPOSES |
| July 20, 2018 | NOT FOR BIDDING FOR OCCO |
| Assigned Disadvantaged Business Enterprise Goal 0 % | This contract is exempt from federal oversight. |

This certifies that the undersigned bidder, duly sworn, is an authorized representative of the firm named above; that the bidder has examined and carefully prepared the bid from the plans, Highway Work Proposal, and all addenda, and has checked the same in detail before submitting this proposal or bid; and that the bidder or agents, officer, or employees have not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal bid.

| aken any action in restraint of free competitive bidding in connection with this prop | oosal bid. |
|---|---|
| Do not sign, notarize, or submit this Highway Work Proposal when s | submitting an electronic bid on the Internet. |
| Subscribed and sworn to before me this date | |
| (Signature, Notary Public, State of Wisconsin) | (Bidder Signature) |
| (Print or Type Name, Notary Public, State Wisconsin) | (Print or Type Bidder Name) |
| (Date Commission Expires) | (Bidder Title) |
| Notary Seal | |
| For Department | Use Only |
| Type of Work | |

Removals, grading, base, concrete pavement, HMA pavement, storm sewer, erosion control, permanent signing, traffic control, pavement marking, fencing, restoration, lighting, traffic signals.

Notice of Award Dated

Date Guaranty Returned

PLEASE ATTACH PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2015 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

- Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
 - 1. Electronic bid on the internet.
 - 2. Electronic bid on a printout with accompanying diskette or CD ROM.
 - 3. Paper bid under a waiver of the electronic submittal requirements.
- (2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.
- (3) The department will provide bidding information through the department's web site at: http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 P.M. local time on the Thursday before the letting. Check the department's web site after 5:00 P.M. local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid ExpressTM 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 ExpressTM on-line bidding exchange by following the instructions provided at the www.bidx.com web site or by contacting:

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

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:

 http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, Room 601, 4802 Sheboygan Avenue, Madison, WI, during regular business hours.

Addenda posted after 5:00 PM on the Thursday before the letting will be emailed to the eligible bidders for that proposal. All eligible bidders shall acknowledge receipt of the addenda whether they are bidding on the proposal or not. Not acknowledging receipt may jeopardize the awarding of the project.

B Submitting Electronic Bids

B.1 On the Internet

- (1) Do the following before submitting the bid:
 - 1. Have a properly executed annual bid bond on file with the department.
 - 2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:
 - 1. Download the latest schedule of items reflecting all addenda from the Bid Express web site.
 - 2. Use ExpediteTM software to enter a unit price for every item in the schedule of items.
 - 3. Submit the bid according to the requirements of ExpediteTM software and the Bid ExpressTM web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid.
 - 4. Submit the bid before the hour and date the Notice to Contractors designates.
 - 5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.
- (3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

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

(1) Download the latest schedule of items from the Wisconsin pages of the Bid ExpressTM web site reflecting the latest addenda posted on the department's web site at:

http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

Use Expedite TM 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 Meb site to assure that the schedule of items is prepared properly.

(2) Staple an 8 1/2 by 11 inch printout of the ExpediteTM generated schedule of items to the other proposal documents submitted to the department as a part of the bidder's sealed bid. As a separate submittal not in the sealed bid envelop but due at the same time and place as the sealed bid, also provide the ExpediteTM generated schedule of items on a 3 1/2 inch computer diskette or CD ROM. Label each diskette or CD ROM with the bidder's name, the 4 character department-assigned bidder identification code from the top of the bidding proposal, and a list of the proposal numbers included on that diskette or CD ROM as indicated in the following example:

Bidder

Name

BN00

Proposals: 1, 12, 14, & 22

- (3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.
- (4) The bidder-submitted printout of the ExpediteTM generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.

- (5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:
 - 1. The check code printed on the bottom of the printout of the ExpediteTM generated schedule of items is not the same on each page.
 - The check code printed on the printout of the ExpediteTM generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.
 - 3. The diskette or CD ROM is not submitted at the time and place the department designates.

C Waiver of Electronic Submittal

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

PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

PRINCIPAL

| (Company Name) (Affix Corpor | ate 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 FO | OR PRINCIPAL | NOTARY FO | R SURETY |
| (I | Date) | (Dat | te) |
| State of Wisconsin |) | State of Wisconsin |) |
| |) ss. County) | |) ss. _County) |
| On the above date, this instrument named person(s). | was acknowledged before me by the | On the above date, this instrument w named person(s). | as acknowledged before me by the |
| (Signature, Notary Po | ublic, State of Wisconsin) | (Signature, Notary Publ | ic, State of Wisconsin) |
| (Print or Type Name, Nota | (Print or Type Name, Notary Public, State of Wisconsin) (Print or Type Name, Notary Public, State of Wisconsin) | | Public, State of Wisconsin) |
| (Date Comn | nission Expires) | (Date Commis | sion 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

Wisconsin Department of Transportation

(Date)

| Time Period Valid (| From/To) |
|---------------------|--|
| Name of Surety | |
| Name of Contractor | r |
| Certificate Holder | Wisconsin Department of Transportation |
| | y that an annual bid bond issued by the above-named Surety is currently on file with the eartment of Transportation. |
| | is issued as a matter of information and conveys no rights upon the certificate holder mend, 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)

March 2010

LIST OF SUBCONTRACTORS

Section 66.0901(7), Wisconsin Statutes, provides that as a part of the proposal, the bidder also shall submit a list of the subcontractors the bidder proposes to contract with and the class of work to be performed by each. In order to qualify for inclusion in the bidder's list a subcontractor shall first submit a bid in writing, to the general contractor at least 48 hours prior to the time of the bid closing. The list may not be added to or altered without the written consent of the municipality. A proposal of a bidder is not invalid if any subcontractor and the class of work to be performed by the subcontractor has been omitted from a proposal; the omission shall be considered inadvertent or the bidder will perform the work personally.

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

| Name of Subcontractor | Class of Work | Estimated Value |
|-----------------------|---------------|-----------------|
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DECEMBER 2000

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

Instructions for Certification

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

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

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

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

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

Special Provisions

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 1030-11-71, N-S Freeway - CTH K Interchange, CTH K IC Crossroad, IH 94, located in Racine County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2017 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system. 100-005 (20160607)

2. Scope of Work.

The work under this contract shall consist of removals, grading, base aggregate, HMA pavement, storm sewer, culverts, erosion control, permanent signing, traffic signal, lighting, traffic control, pavement markings, restoration and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract. 104-005 (20090901)

3. Prosecution and Progress.

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

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

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

Northern Long-eared Bat (*Myotis septentrionalis*)

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

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

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

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

A Schedule of Operations

The schedule of operations shall conform to the requirements described below, unless modifications are approved in writing by the engineer.

Definitions

CTH K West: CTH K west of IH 94 southbound ramps CTH K East: CTH K east of IH 94 northbound ramps

CTH K IC: CTH K between IH 94 southbound and northbound ramps

Stage 1A

- Begin construction of CTH K West
 - Station 11+50 to Station 41+50
- · Complete construction of the outside portions of the West Frontage Road
 - Station 2057+00 to Station 4055+00

Close CTH K West. Keep CTH K East and CTH K IC open to through traffic in both directions, and keep IH 94 ramps open. Keep the East Frontage Road and West Frontage Road open to through traffic in both directions.

Stage 1B

- Complete construction of CTH K West
 - Station 11+50 to Station 41+50
- Begin and complete construction of the median of the West Frontage Road
 - Station 2057+00 to Station 4055+00

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Continue closure of CTH K West. Keep CTH K East and CTH K IC open to through traffic in both directions, and keep IH 94 ramps open. Keep the East Frontage Road and West Frontage Road open to through traffic in both directions.

Stage 2A

 Remove portions of existing curb and gutter, islands; and construct asphaltic surface temporary on the East Frontage Road

Stage 2 A may be completed during Stages 1A and 1B.

Stage 2B

- Do not begin Stage 2B until Stage 1A, 1B and 2A are complete and all lanes of CTH K West and the West Frontage Road are fully open to traffic.
- · Begin construction of CTH K East
 - Station 44+50 to Station 76+00
- Begin and complete construction of the northbound lanes of the East Frontage Road
 - Station 3050+50 to Station 5056+00

Close CTH K East. Keep CTH K West and CTH K IC open to through traffic in both directions, and keep IH 94 ramps open. Keep the East Frontage Road and West Frontage Road open to through traffic in both directions.

Stage 2C

- Continue construction of CTH K East
 - Station 44+50 to Station 76+00
- Begin and complete construction of the southbound lanes of the East Frontage Road
 - Station 5051+00 to Station 5053+50

Continue closure of CTH K East. Keep CTH K West and CTH K IC open to through traffic in both directions, and keep IH 94 ramps open. Keep the East Frontage Road and West Frontage Road open to through traffic in both directions.

Stage 2D

- Complete construction of CTH K East
 - Station 44+50 to Station 76+00
- Begin and complete construction of the median of the East Frontage Road
 - Station 3054+00 to Station 5055+50

Continue closure of CTH K East. Keep CTH K West and CTH K IC open to through traffic in both directions, and keep IH 94 ramps open. Keep the East Frontage Road and West Frontage Road open to through traffic in both directions.

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B Closure Restrictions

Do not close CTH K East, as shown in Stage 2, prior to September 5, 2017, or as approved by the engineer.

C Work Restrictions

Comply with all local ordinances that apply to work operations, including those pertaining to working during nighttime work hours. Any ordinance variance issued by the municipality or required permits shall be furnished to the engineer, by the contractor, in writing three working days before performing such work.

Park equipment and store material only at work sites approved by the engineer.

Maintain access to all commercial and private properties along the West Frontage Road and the East Frontage Road at all times unless otherwise noted in the plan and except during construction of the driveways. During driveway construction, do not close any driveway approach or remove from service without providing five days' notice to the occupants of the premises to remove their vehicles prior to driveway removal or closing of the driveway approach access. Replace the driveway as expeditiously as possible to minimize the inconvenience to the occupants whose driveway has been removed or closed.

Final Completion of Work

Replace standard spec 108.11 paragraph (3) as follows:

The department will assess \$6000 in daily liquidated damages. These liquidated damages reflect the cost of engineering, supervision, and a portion of road user costs. stp-108-055 (20130615)

The completion date is based on an expedited work schedule and may require extraordinary forces and equipment; work on Saturdays, Sundays; and work at night.

4. Traffic.

General

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

Utilize flaggers, signs, barricades, and drums as may be necessary to safeguard and direct traffic at all locations where construction operations may interfere with or restrict the smooth flow of traffic.

Use drums and barricades to direct vehicular and pedestrian traffic in the work zone and to protect and delineate hazards such as open excavations, abrupt drop-offs, and exposed manholes, inlets, and hydrants.

Coordinate traffic requirements under this contract with other adjacent and concurrent Department of Transportation or local municipality projects. Implement and coordinate with

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other contractors all traffic control as shown on the plans. Modifications to the traffic control plan may be required by the engineer to be safe and consistent with adjacent work by others.

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

Submit all traffic control change requests to the engineer at least 48 hours prior to an actual traffic control change. A request does not constitute approval.

Emergency Vehicle Access

Maintain emergency vehicular access at all times to all through roadways located along CTH K ND the West Frontage Road and the East Frontage Road.

Local Vehicle Access

Maintain local vehicular access at all times to all driveways located along CTH K, the frontage roads, and all the other side roads within the project limits unless otherwise noted in the plans. Notify the property occupant 5 days in advance of the driveway reconstruction to verify closure or staged driveway construction methods. Construct driveway approaches to commercial businesses in stages or provide temporary access such that access to commercial property is provided at all times during the life of the project. Temporary access may be constructed with base course at the contract unit price for Base Aggregate Dense 1½-inch. Maintain at least one access to businesses at all times.

5. Traffic Meetings and Traffic Control Scheduling.

Every Wednesday by 9:00 AM, submit a detailed proposed 2-week look-ahead traffic closure schedule to the engineer. Type the detailed proposed 2-week look-ahead closure schedule into an excel spreadsheet provided by the engineer. Enter information such as closure dates, duration, work causing the closure and detours to be used. Also enter information such as ongoing long-term closures, emergency contacts and general 2-month look-ahead closure information into the excel spreadsheet.

Meet with the engineer between 10:00 - 11:00 AM on Wednesdays at the field office to discuss and answer questions on the proposed schedule. Edit, delete and add closures to the detailed proposed 2-week look-ahead schedule, as directed by the engineer, so that proposed closures meet specification requirements. Other edits, deletions or additions unrelated to meeting specification requirements may also be agreed upon with the engineer during the 10:00 AM meeting.

Every Wednesday at 2:00 PM, or as scheduled by the engineer, attend a weekly traffic meeting. The meeting will bring local agencies, project stakeholders, owner managers, owner engineers, contractors, document control and construction engineering personnel together to discuss traffic staging, closures and general impacts. Upon obtaining feedback from the meeting attendees, edit, delete and add information to the detailed 2-week look-ahead closure schedule, as needed. Submit the revised 2-week look-ahead to the engineer.

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Obtain approval from the engineer for any mid-week changes to the closure schedule. Revise the 2-week look-ahead as required and obtain engineer approval. SEF Rev. 15 0319

Wisconsin Lane Closure System Advance Notification

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

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

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

6. Holiday Work Restrictions.

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

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

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- From noon Friday, September 1, 2017 to 6:00 AM Tuesday, September 5, 2017 for Labor Day;
- From noon Wednesday, November 22, 2017 to 6:00 AM Monday, November 27, 2017 for Thanksgiving.

107-005 (20050502)

7. Utilities.

This contract comes under the provisions of Administrative Rule TRANS 220.

Additional information regarding recently relocated utility facilities may be available on permits issued to the utility companies. These permits can be viewed at the Region Office during normal working hours. Contact WisDOT SE Freeways Utility Coordinator Douglas Gendron at (414) 750-4362 for further information.

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

Contact utility companies listed in the plans prior to preparing bids to obtain current information on existing utility locations and the status of any new utility relocation work.

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

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

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

Known utilities in the project area are as follows:

AT&T Corporation has an existing underground communications duct package beginning beyond the southerly project limits and running northerly along the west right-of-way of the West Frontage Road, crossing CTH K at Station 32EB+52, and continuing northerly to beyond the northerly project limits. This duct package consists of three 2-inch ducts owned by Level 3 Communications bundled with six 2-inch ducts owned by AT&T Corporation, for a total of nine ducts. This duct package will remain in place without adjustment.

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AT&T Corporation also has a discontinued underground duct package beginning beyond the southerly project limits and running northerly approximately 100 feet west of the centerline of IH 94, crossing CTH K at Station 41EB+93, and continuing northerly to beyond the northerly project limits.

Contact Ken Nine, (574) 904-6336 cell, of JMC Engineers & Associates, Inc. seven days in advance to coordinate locations and any excavation near their facilities.

AT&T Wisconsin has existing communications facilities within the project limits at the following locations:

- An existing overhead communications line on We Energies poles beginning beyond the westerly project limits and running easterly along the north side of CTH K to Station 18WB+24, 77'LT, where it turns and runs southwesterly, crossing CTH K at Station 18WB+30, and continuing southwesterly to beyond the southerly project limits. This line will remain in place without adjustment.
- A existing underground communications line beginning at a pole at Station 29WB+78, 70'LT and running southerly, easterly and southerly, crossing CTH K at Station 30EB+49, and continuing southerly to Station 30EB+49, 51'RT where it turns and runs easterly to the west right-of-way of the West Frontage Road. From there the line turns south and continues along the west right-of-way to beyond the southerly project limits. This line will remain in place without adjustment.
- An existing overhead communications line on We Energies poles beginning beyond the southerly project limits and running northerly along the west right-of-way of the West Frontage Road to a pole at Station 2057+00, 37'LT, where the line turns west and runs to a pole at Station 2057+00, 142'LT. From there the line turns and runs northerly, crossing CTH K at Station 31EB+52, and continuing northerly and ending at a pole at Station 31WB+51, 70'LT. This line will remain in place without adjustment. We Energies will relocate a pole on this line from Station 31EB+52, 44'RT to Station 31EB+52, 49'RT prior to construction and AT&T will reattach to the new pole.
- An existing underground communications line beginning at a pole at Station 31WB+51, 70'LT and running easterly and northeasterly to the westerly right-of-way of the West Frontage Road. From there the line runs northerly along the west right-of-way and ends at a pole at Station 4055+29, 54'LT. This line will remain in place without adjustment.
- An existing overhead communications line on We Energies poles beginning beyond the southerly project limits and running northerly along the east right-of-way of the East Frontage Road to a pole at Station 3053+54, 60'RT. From there the line continues northerly, crossing CTH K at Station 52EB+91, and continuing northerly beyond the northerly project limits. This line will remain in place without adjustment.
- An existing overhead communications line on We Energies poles beginning at a pole at Station 3053+54, 60'RT and running northwesterly, crossing the East Frontage Road and continuing northwesterly and ending at a pole at Station 50EB+17, 58'RT. This line will remain in place without adjustment.

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AT&T Wisconsin also has discontinued communications facilities within the project limits in the following locations:

- A discontinued underground communications line beginning beyond the southerly project limits and running northeasterly, crossing CTH K at Station 13+09, and continuing northeasterly and ending at Station 13+09, 23'LT.
- A discontinued underground communications line beginning at the westerly project limits and running southeasterly approximately 30' northwesterly of the centerline of CTH K and ending at a pedestal at Station 18EB+36, 41'RT.
- A discontinued underground communications line beginning Station 35WB+60, 5'LT and running easterly to Station 39WB+75, 14'LT where it turns and runs northwesterly and ends at Station 40WB+44, 94'LT.

Contact Mark Eder, (262) 896-7434 office / (262) 212-2203 cell, of AT&T Wisconsin seven days in advance to coordinate locations and any excavation near their facilities.

Caledonia Utility District has existing sanitary sewer and water facilities within the project limits at the following locations:

- An existing sanitary sewer beginning at Station 45EB+87, 36'RT and running easterly along the south side of CTH K, crossing the East Frontage Road in a steel casing at Station 3055+86, and continuing easterly to beyond the easterly project limits. This sewer will remain in place without adjustment.
- An existing sanitary sewer beginning at a manhole at Station59EB+62, 26'RT and running northeasterly, cross CTH K at Station 59EB+63 in a steel casing, and continuing northeasterly to beyond the northerly project limits. This sewer will remain in place without adjustment.
- An existing water main beginning at Station 45WB+66, 59'LT and running easterly along the north side of CTH K, crossing the East Frontage Road at Station 5052+45, and continuing easterly and southeasterly along the north side of CTH K and ending at a tee at Station 58WB+72, 74'LT. This main will remain in place without adjustment. Adjust the water valves as shown in the plans.
- An existing water main beginning beyond the northerly project limits and running southwesterly along the west side of Carol Road to Station 58WB+70, 27'LT where it turns and runs southeasterly along the north side of CTH K to beyond the easterly project limits. This main will remain in place without adjustment. Adjust the water valves as shown in the plans.
- An existing water main beginning at a tee at Station 52+99, 84'LT and running southwesterly, crossing CTH K at 52EB+99, and continuing southwesterly to Station 52+98, 75'RT where it turns and runs southeasterly and ends at a fire hydrant at Station 53EB+34, 75'RT. This line will remain in place without adjustment.
- An existing water main beginning at a tee at Station 45EB+90, 94'LT and running northeasterly and ending at a fire hydrant at Station 45EB+91, 109'LT. This main will remain in place without adjustment.

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- An existing water main beginning at a tee at Station 50EB+71, 90'LT and running northeasterly and ending at a fire hydrant at Station 50EB+72, 105'LT. This main will remain in place without adjustment.
- An existing water main beginning at a tee at Station 55EB+69, 86'LT and running northeasterly and ending at a fire hydrant at Station 55EB+69, 100'LT. This main will remain in place without adjustment.
- An existing water main beginning at a tee at Station 64EB+35, 69'LT and running northeasterly and ending at a fire hydrant at Station 64EB+35, 87'LT. This main will remain in place without adjustment.
- An existing water main beginning at a tee at Station 69EB+16, 45'LT and running northeasterly and ending at a fire hydrant at Station 69EB+18, 79'LT. This main will remain in place without adjustment.
- An existing water main beginning at a tee at Station 74EB+40, 45'LT and running northeasterly and ending at a fire hydrant at Station 74EB+40, 133'LT. This main will remain in place without adjustment.
- An existing water main beginning at a tee at Station 58EB+69, 130'LT and running northeasterly and ending at a fire hydrant at Station 58EB+64, 130'LT. This main will remain in place without adjustment.

Contact Bob Lui, (262) 681-3900, of the Village of Caledonia Utility District seven days in advance to coordinate locations and any excavation near their facilities.

There is also an existing private water main within the project limits beginning beyond the westerly project limits of the West Frontage Road and running easterly, crossing the West Frontage Road at Station 2057NB+81, and continuing easterly to beyond the project limits. This main will remain in place without adjustment.

Charter Communications has existing communications facilities within the project limits at the following locations:

- An existing overhead communications line on We Energies poles beginning beyond the southerly project limits and running northerly along the west right-of-way of the West Frontage Road and ending at a pole at Station 2057+00, 37'LT. This line will remain in place without adjustment.
- An existing overhead communications line on We Energies poles beginning beyond the westerly project limits and running easterly, crossing the West Frontage Road at Station 2057+00, and continuing beyond the easterly project limits. This line will remain in place without adjustment.

Contact Steve Cramer, (414) 227-4045 office / (414) 688-2385 cell, of Charter Communications seven days in advance to coordinate locations and any excavation near their facilities.

Level 3 Communications has an existing underground communications duct package beginning beyond the southerly project limits and running northerly along the west right-of-way of the West Frontage Road, crossing CTH K at Station 32EB+52, and continuing

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northerly to beyond the northerly project limits. This duct package consists of three 2-inch ducts owned by Level 3 Communications bundled with six 2-inch ducts owned by AT&T Corporation, for a total of nine ducts. This duct package will remain in place without adjustment.

Level 3 Communications also has a discontinued underground duct package beginning beyond the southerly project limits and running northerly approximately 100 feet west of the centerline of IH 94, crossing CTH K at Station 41EB+93, and continuing northerly to beyond the northerly project limits.

Contact Brahim Gaddour, (414) 704-1026, of Level 3 Communications seven days in advance to coordinate locations and any excavation near their facilities.

We Energies - Electric has existing overhead and underground electric facilities within the project limits at the following locations:

- An existing underground electric line beginning at a pole at Station 14EB+45, 50'LT and running southeasterly, crossing CTH K at 14EB+45, and continuing southeasterly to beyond the southerly project limits. This line will remain in place without adjustment.
- An existing overhead electric line beginning beyond the westerly project limits and running southeasterly and easterly along the north right-of-way side of CTH K, crossing the West Frontage Road at Station 4054+18, and continuing easterly and ending at a pole at Station 35WB+63, 40'LT. This line will remain in place without adjustment.
- An existing overhead electric line beginning at a pole at Station 18EB+25, 82'LT and running southwesterly, crossing CTH K at 18EB+31, and continuing southwesterly to beyond the southerly project limits. This facility will remain in place without adjustment.
- An existing overhead electric line beginning beyond the easterly project limits and running westerly to a pole at 2057+00, 72'RT, crossing the West Frontage Road at Station 2057+00, and continuing westerly to a pole at Station 2057+00, 142'LT. From there the line turns and runs northerly and ends at a pole at Station 31WB+51, 70'LT. This line will remain in place without adjustment. We Energies will relocate a pole on this line from Station 31EB+52, 44'RT to Station 31EB+52, 49'RT prior to construction.
- An existing overhead electric line beginning beyond the southerly project limits and running northerly along the west right-of-way of the West Frontage road and ending at a pole at 2057+00, 37'LT. This line will remain in place without adjustment.
- An existing underground electric line beginning at a pole at Station 2057+00, 37'LT and running northerly, crossing CTH K at Station 32EB+57, and continuing northerly to beyond the northerly project limits. This line will remain in place without adjustment. We Energies will lower a portion of this line at Station 32EB+62, 54'LT prior to construction.

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- An existing underground electric line beginning at a pole at Station 46+45, 57'RT and running northerly, crossing CTH K at Station 46EB+35, and continuing northerly to Station 46EB+30, 94'LT. From there the line turns and runs northwesterly to a cabinet at 45EB+62, 141'LT. We Energies will relocate this line prior to construction.
- An existing overhead electric line beginning at a pole at Station 46+45, 57'RT and running easterly along the south side of CTH K to Station 50WB+17, 58'RT where it turns and runs southeasterly, crossing the East Frontage Road at Station 3054+10, and continues southeasterly to a pole at Station 3053+55, 60'RT. This line will remain in place without adjustment.
- An existing overhead electric line beginning beyond the southerly project limits and running northerly along the easterly right-of-way of the East Frontage Road to a pole at Station 3054+75, 61'RT. From there the line continues northerly, crossing CTH K at Station 52EB+91, and continuing northerly to beyond the project limits. This line will remain in place without adjustment.
- An existing overhead electric line beginning at a pole at Station 3054+75, 61'RT and running northeasterly to Station 53EB+27, 46'RT where it turns and runs easterly along the south side of CTH K to Station 57EB+32, 55'RT. From there it turns and runs northeasterly, crossing CTH K at Station 57EB+90, and continues northeasterly and ends at a light pole at Station 58EB+75, 83'LT. This line will remain in place without adjustment. We Energies will adjust the light pole at Station 58EB+75, 83'LT prior to construction.
- An existing overhead electric line beginning at a pole at Station 53EB+27, 46'RT and running northeasterly, crossing CTH K at Station 54EB+00, and continuing northeasterly to Station 55WB+70, 102'LT where it turns and runs easterly and southeasterly along the north side of CTH K, crossing Carol Road, and continuing southeasterly beyond the easterly project limits. This line will remain in place without adjustment.
- An existing overhead electric line beginning beyond the easterly project limits and running northwesterly along the south side of CTH K to a pole at Station 76EB+10, 42'RT, where it turns and runs northerly, crossing CTH K at Station 75+59, and continues beyond the northerly project limits. This line will remain in place without adjustment.
- Existing guy poles located at 16EB+64, 98'RT and 22EB+34, 100'RT. These facilities will remain in place without adjustment.

We Energies also has a discontinued underground electric line beginning at Station 14+52, 28'RT and running northeasterly, crossing CTH K at Station 14+58, continuing northeasterly and ending at Station 14+60, 30'LT.

Contact Jason Chapin, (414) 994-5575 office / (414) 587-0655 cell, of We Energies seven days in advance to coordinate locations and any excavation near their facilities.

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We Energies - Gas has existing underground gas facilities within the project limits at the following locations:

- An existing gas line beginning at the westerly project limits and running southeasterly and easterly along the south right-of-way of CTH K to the west right-of-way of the West Frontage Road where it turns and runs southerly along the west right-of-way to Station 2057NB+88, 70'LT where it turns and runs easterly, crossing the West Frontage Road at Station 2057NB+88, and continues easterly to Station 2057NB+88, 46'RT. From there it runs northerly and northeasterly along the easterly right-of-way of the West Frontage Road to the southerly right-of-way of CTH K where it turns and runs easterly along the southerly right-of-way and ends at Station 39EB+56, 67'RT. This line will remain in place without adjustment.
- An existing gas line beginning at Station 32EB+00, 44'RT and running northerly, crossing CTH K at Station 32EB+02, and continuing northerly to the northerly right-of-way of CTH K where it turns and runs northeasterly to the westerly right-of-way of the West Frontage Road. From there the line runs northerly along the west right-of-way to beyond the northerly project limits. This line will remain in place without adjustment.
- An existing gas line beginning at Station 35EB+56, 49'RT and running northerly, crossing CTH K at Station 35EB+56, and continuing northerly and ending at the northerly right-of-way of CTH K. This line will remain in place without adjustment.
- An existing gas line runs beginning at Station 2057+88, 46'RT and running southerly along the east right-of-way of the West Frontage Road to beyond the southerly project limits. This line will remain in place without adjustment.
- An existing gas line beginning beyond the northerly project limits and running southerly, crossing CTH K at Station 49EB+00, and continuing southerly to Station 49EB+00, 56'RT where it turns and runs easterly along the south right-of-way of CTHK to Station 49EB+90, 55'RT where it turns and runs southeasterly to Station 51EB+13, 98'RT. From there it runs easterly, crossing the East Frontage Road at Station 3055NB+14, and continues easterly to Station 53EB+25, 86'RT where it turns and runs northerly to the southerly right-of-way of CTH K. From there the line runs easterly and southeasterly along the southerly right-of-way to beyond the easterly project limits. This line will remain in place without adjustment.
- An existing gas line beginning at Station 54EB+90, 46'RT and running northerly, crossing CTH K at Station 54EB+80, and continuing northerly to beyond the northerly project limits. This line will remain in place without adjustment.
- An existing gas line beginning at Station 59EB+50, 55'RT and running northeasterly, crossing CTH K at Station 59EB+46, and continuing northeasterly to beyond the northerly project limits. This line will remain in place without adjustment.
- An existing gas line beginning at Station 66EB+58, 56'RT and running northeasterly, crossing CTH K at Station 66EB+58, and continuing northeasterly to beyond the northerly project limits. This line will remain in place without adjustment.
- An existing gas line beginning at Station 67EB+98, 51'RT and running northeasterly, crossing CTH K at Station 67EB+98, and continuing northeasterly to beyond the northerly project limits. This line will remain in place without adjustment.

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- An existing gas line beginning at Station 75EB+82, 56'RT and running northeasterly, crossing CTH K at Station 75EB+82, and continuing northeasterly to beyond the northerly project limits. This line will remain in place without adjustment.

We Energies also has discontinued gas lines within the project limits at the following locations:

- Discontinued gas lines along the southerly side of CTH K throughout the project limits
- Discontinues gas lines crossings of CTH K, from the south side of CTH K to the north right-of-way of CTH K, at Station 45EB+84, Station 49EB+31, Station 59EB+34, Station 68EB+15 and Station 75EB+94.

We Energies will adjust three gas valves at Station 30EB+58, 69'RT, Station 32EB+00, 43'RT and 59EB+47, 54'RT during construction. Allow three working days for the adjustment of the gas valves.

As identified in the We Energies work plan, there are existing gas facilities in close proximity to proposed storm sewer facilities. Use caution when installing proposed storm sewer at the following locations:

- Proposed storm sewer structures and pipes between structures 602A (Station 4055+00 76'LT) to 602B (Station 4054+76 64'LT)
- Proposed storm sewer structures and pipes between structures 615 (Station 48EB+00 54'LT) to 616 (Station 50EB+50 54'LT)
- Proposed storm sewer structures and pipes between structures 618 (Station 52EB+75 54'LT) to 619 (Station 54EB+50 54'LT)
- Proposed storm sewer structures and pipes between structures 620 (Station 58EB+57 54'LT) to 621 (Station 59EB+95 76'LT)

Contact Josh Mount, (414) 218-2053, 14 days in advance to coordinate locations and any excavation near their facilities and follow up with a 3 day reminder notice.

WisDOT - Lighting has an existing overhead and underground lighting facilities within the project limits at the following locations:

- An existing underground electric line beginning at a cabinet at Station 45EB+62, 141'LT and running westerly along the north right-of-way of CTH K to a pull box at Station 33EB+93, 104'LT where it turns and runs southerly, ending at a light pole at Station 33EB+93, 64'LT. Relocate, reconstruct, discontinue, remove and leave in place portions of these facilities as shown in the plans.
- An existing underground electric line beginning at a cabinet at Station 45EB+62, 141'LT and running southerly to Station 45EB+60, 104'LT where it turns and runs easterly along the north right-of-way of CTH K and ends at a light pole at Station 50EB+85, 102'LT. Relocate, reconstruct, discontinue, remove and leave in place portions of these facilities as shown in the plans.

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- Existing light poles and overhead lighting lines at the intersection of CTH K and the West Frontage Road. Relocate, reconstruct, discontinue, remove, and leave in place portions of these facilities as shown in the plans.
- Existing light poles and overhead lighting lines at the intersection of the southbound IH 94 ramps and CTH K. These facilities will remain in place without adjustment.
- Existing light poles and an underground lighting line at the intersection of the northbound IH 94 ramps and CTH K beginning at a light pole at Station 44EB+58, 113'LT and running easterly to a pull box at Station 44EB+72, 116'LT where it turns and runs southerly, crossing CTH K at Station 45EB+00, and continuing southerly and ending at a light pole at Station 45EB+07, 55'RT. These facilities will remain in place without adjustment.
- Existing light poles and overhead lighting lines at the intersection of CTH K and the East Frontage Road. Relocate, reconstruct, discontinue, remove, and leave in place portions of these facilities as shown in the plans.

Contact Eric Perea, (262) 574-5422 office / (414) 750-0935 cell, of WisDOT 7 days in advance to coordinate locations, construction activities and any excavation near their facilities.

WisDOT - Signals has no existing signal facilities within the project limits. Construct new signal facilities as shown in the plans.

Contact WisDOT Traffic Signal Operations, (414-750-2605), seven days in advance to coordinate construction.

WisDOT - STOC has existing underground communications facilities within the project limits at the following locations:

- An existing underground communications line in the previously described AT&T Corporation duct package beginning beyond the southerly project limits and running northerly along the west right-of-way of the West Frontage Road, crossing CTH K at Station 32EB+52, and continuing northerly to beyond the northerly project limits. This line will remain in place without adjustment.
- An existing underground communications line beginning beyond the southerly project limits and running northerly along the west shoulder of IH 94, crossing CTH K at Station 42EB+34, and continuing northerly to beyond the northerly project limits. This facility will remain in place without adjustment.
- An existing underground communications line beginning at a cabinet at Station 43EB+54, 65'LT and running northerly along the east shoulder of IH 94 to beyond the northerly project limits. This facility will remain in place without adjustment.

Contact Jeff Madson, (414) 225-3723, of WisDOT seven days in advance to coordinate locations and any excavation near their facilities.

8. Other Contracts.

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

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It is expected that routine maintenance by the Village of Caledonia, Town of Raymond, and Racine County personnel may be required at certain times concurrently with the work being done under this contract.

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

Contract ID 1701, CTH U (76th St) reconstruction from CTH K to CTH G in the Town of Raymond. The Racine County contact is Nathan Plunkett, County Engineer at (262) 886-8440; Nathan.Plunkett@racinecounty.com

Contract ID W140830.00 Village of Mount Pleasant Sewer Utility, CTH 'V' Sanitary Trunk Sewer; Contract ID 8022-10006.200 City of Racine Water & Wastewater Utility, CTH 'V' Water Transmission Main. The Utility contractor for both the sewer and water projects is Dorner, Inc. of Luxemburg, WI. Contractor contact is Todd Dorner at (920) 845-2442; todd.dorner@dornerinc.com

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

The department has obtained a U.S. Army Corps of Engineers Section 404 Permit and WisDNR 401 Water Quality Certification for work being performed on this project in or adjacent to wetlands. A copy of the permit is available from the regional office by contacting Eyad Ghani at (262) 548-8756.

Comply with the requirements of the permit and certification in addition to requirements of the contract. Perform remedial activities without extra compensation if not in compliance. 107-SER20 (20101021)

10. Erosion Control.

Supplement standard spec 107.20 with the following:

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

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Provide the ECIP 14 days prior to the pre-construction conference. Provide one copy of the ECIP to the department and one copy of the ECIP to the WDNR Liaison, Craig Webster, (262) 574-2141, craig.webster@wisconsin.gov. Do not implement the ECIP until department approval, and perform all work according to the approved ECIP.

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

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

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

Do not allow any excavation for; structures, utilities, grading, maintaining drainage that requires dewatering(mechanical pumping) of water containing sediments (sand, silt, and clay particles) to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. Prior to each dewatering operation, submit to the department a separate ECIP amendment describing in words and pictorial format an appropriate BMP for sediment removal, according to WisDNR Storm Water Construction Technical Standard, Code 1061, Dewatering. Include reasoning, location, and schedule duration proposed for each operation. Per Code 1061, include all selection criteria: site assessment, dewatering practice selection, calculations, plans, specifications, operations, maintenance, and location of proposed treated water discharge. Provide a stabilized discharge area. If directing discharge towards or into an inlet structure, provide additional inlet protection for back-up protection. Dewatering is considered incidental to the project. SEF Rev. 15_0120

11. Environmental Protection, Aquatic Exotic Species Control.

Exotic invasive organisms such as VHS, zebra mussels, purple loosestrife, and Eurasian water milfoil are becoming more prolific in Wisconsin and pose adverse effects to waters of the state. Wisconsin State Statutes 30.07, "Transportation of Aquatic Plants and Animals; Placement of Objects in Navigable Waters", details the state law that requires the removal of aquatic plants and zebra mussels each time equipment is put into state waters.

At construction sites that involve navigable water or wetlands, use the follow cleaning procedures to minimize the chance of exotic invasive species infestation. Use these procedures for all equipment that comes in contact with waters of the state and/or infested water or potentially infested water in other states.

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Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels prior to being used in other waters of the state. Before using equipment on this project, thoroughly disinfect all equipment that has come into contact with potentially infested waters. Use the following inspection and removal procedures (guidelines from the Wisconsin Department of Natural Resources http://dnr.wi.gov/topic/fishing/documents/vhs/disinfection protocols.pdf for disinfection:

- 1. Prior to leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;
- 2. Drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped;
- 3. Inspect boat hulls, propellers, trailers and other surfaces. Scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can prior to leaving the area or invested waters; and
- 4. Disinfect your boat, equipment and gear by either:
 - a. Washing with ~212° F water (steam clean), or
 - b. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or
 - c. Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore this disinfect should be used in conjunction with a hot water (>104° F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.

107-055 (20130615)

12. Hauling Restrictions.

Replace standard spec 107.2 with the following:

Present to the department, five business days before any proposed hauling, a proposed haul route plan detailing haul routes that are not part of the state trunk highway system. Include the months, days of the week, time of day, number of trucks, types of trucks and maximum loads of trucks anticipated to accomplish the project work in the haul route submittal.

The department will review the submittal and either approve or provide a letter with comments and proposed revisions to the contractor within five business days of its receipt. If approved, the department will subsequently survey the existing condition of that haul route to establish a baseline for assessing damage that the contractor's hauling operations might cause.

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At all times, conduct operations in a manner that will cause a minimum of disruption to traffic on existing roadways.

SEF Rev. 16 0817

13. Public Convenience and Safety.

Revise standard spec 107.8(6) as follows:

Check for and comply with local ordinances governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 8:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer. 107-001 (20060512)

14. Coordination with Businesses and Residents.

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

15. 3D Model Data.

The department will provide for Project 1030-11-71 for informational purposes only (see following disclaimer) detailed 3D proposed and existing model data or portions of data which may include: roadways, temporary roadways, topography, grading, temporary grading, drainage, temporary drainage, structures, temporary structures, utilities, abandoned utilities, FTMS, signals, temporary signals, signs, temporary signs, lighting, temporary lighting, pavement markings, landscaping, wetlands, waterways, railways, geotech soil borings, parcels, fencing, and survey monumentation. The department will provide the above data or portions of the 3D model data electronically consisting of electronic 2D/3D files containing features, points, reference lines, breaklines, area extents lines, profiles, LandXML v1.2 files and/or TIN Civil 3D surfaces in Autocad 2012 dwg files with horizontal datum - NAD-83 (97), vertical datum - NAVD-88 (91), and coordinate projection - Wisconsin County Coordinate System in U.S. survey ft. The department will provide the model data prior to project LET date within 5 business days of a contractor request submitted as follows: by email to eyad.ghani@dot.wi.gov.

The department is providing, by agreement with contractor and subcontractors, materials stored electronically. The parties recognize that data, plans, specifications, reports, documents, or other information recorded on or transmitted as electronic media (including but not necessarily limited to "CAD, CIM, BIM, GIS or other electronic documents") are

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subject to undetectable alteration, either intentional or unintentional, due to, among other causes, transmission, conversion, media degradation, software error, or human alteration. Accordingly, all such documents are provided to the parties for informational purposes only and not as an end product or as a record document. Any reliance thereon is deemed to be unreasonable and unenforceable. The signed and/or stamped hard copy of the engineer's Instruments of Service plans, specifications and estimates or other contract documents are the only true contract documents of record.

SEF13 0131

16. Notice to Contractor – Airport Operating Restrictions.

Fill out the FAA Notice Criteria tool for any permanent structure (bridge, light pole, etc.) or equipment (crane, etc.) used during construction.

http://oeaaa.faa.gov/oeaaa/external/portal.jsp

If required by the Notice Criteria tool, and for any crane or construction equipment higher than 200 feet above the ground, submit completed form 7460-1 (Notice of Proposed Construction or Alteration) to The Federal Aviation Administration (FAA) at least 45 days before starting construction.

SEF Rev. 14 0609

17. Public Involvement Meetings.

Participate in department-sponsored public involvement meetings as the engineer requests. Ensure that representatives of subcontractors also participate in those meetings if the engineer requests.

SEF Rev. 16 0915

18. Material and Equipment Staging

Submit a map showing all proposed material stockpile or equipment storage locations to the engineer 14 days prior to either preconstruction or proposed use, whichever comes first. Identify the specific purposes for the location. Obtain written permits from the property owner, and submit two copies to the engineer before use. Do not stockpile or store materials or equipment on wetlands.

SEF Rev. 13 0204

19. Available Documents.

The department will make all its information available to bidding contractors. The list of documents that are available for contractors' information includes but is not limited to:

- Design Study Report
- Exceptions to Standards Report
- Pavement Type Selection Report
- Environmental Document
- As-Built Drawings
- Traffic Management Plan

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These documents are available from Eyad Ghani at 141 NW Barstow Street, Waukesha, WI 53187, (262) 548-8756.

Reproduction costs will be applied to any copies requested. SEF Rev. 15 0619

20. Geotechnical Investigation Information.

Replace standard spec 102.5(3) 2 with the following:

Available information relative to subsurface exploration, borings, soundings, water levels, elevations or profiles are available for review at the department's Regions office. Contact Eyad Ghani, 141 NW Barstow Street, Waukesha, WI 53187, (262) 548-8756.

Additional geotechnical information is available from studies and analyses that have been performed by Milwaukee Transportation Partners (MTP) for the Wisconsin Department of Transportation (WisDOT) for other aspects of this project. Review the available information to determine if it is of use. The use or not of the geotechnical information does not relieve performing the work according to the plans and specifications. SEF Rev. 14_1211

21. Contractor Notification.

Replace standard spec 104.2.2.2(2) with the following:

If the contractor discovers the differing condition, provide a written notice, as specified in 104.3.3, of the specific differing condition before further disturbing the site and before further performing the affected work.

104.3.2 (Vacant)

104.3.3 Contractor Initial Written Notice

Replace standard spec 104.3.2 and 104.3.3 with the following:

If required by standard spec 104.2, or if the contractor believes that the department's action, the department's lack of action, or some other situation results in or necessitates a contract revision, promptly provide a written notice to the engineer. At a minimum, provide the following:

- 1. A written description of the nature of the issue.
- 2. The time and date of discovering the problem or issue.
- 3. If appropriate, the location of the issue.

Provide the additional information specified in standard spec 104.3.5 as early as possible to assist the engineer in the timely resolution of an identified issue. The engineer will not require, in subsequent submissions, duplication of information already provided. SEF Rev. 14 1211

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22. Contractor Document Submittals.

This special provision describes minimum requirements for submitting project documents to the department. This special provision does not apply to shop drawing submittals.

Provide one electronic copy of all documents requiring department review, acceptance, or approval. Attach a completed engineer-provided transmittal sheet to each email submittal. The department will reject submittals with incomplete transmittal sheets and require re-submittal.

The department will return one reviewed, accepted, or approved original to the contractor. Additional return originals can be requested. Submit an additional original for each additional return original requested.

Submit electronic copies in Adobe Acrobat (.pdf) format via email to an account the engineer determines. If possible, translate original documents from their native format (e.g. Word, Excel, AutoCAD, etc.) using a .pdf translation routine. Scan other documents to PDF format with a minimum resolution of 600 dpi.

All costs for contractor document submittals are incidental to the contract. SEF Rev. 15 0619

23. Information to Bidders, Use of Recovered Material.

The department encourages the use of waste materials and recovered industrial byproducts as material substitutions (standard spec 106.2.1), provided they meet standard specification gradation requirements, conform to NR 538 requirements, and follow standard engineering practice for their intended use.

SEF Rev. 14 1211

24. Dust Control Implementation Plan.

A Description

This special provision describes developing, updating, and implementing a detailed Dust Control Implementation Plan (DCIP) for all land-disturbing construction activities and associated impacts both within the project site boundaries and outside the project site boundaries. Incorporate contract bid items that this article specifies into the DCIP.

B (Vacant)

C Construction

C.1 General

Control dust on the project as specified in standard spec 107.18. Minimize dust emissions resulting from land disturbing activities. Do not generate excessive air borne particulate matter (PM) or nuisance dust conditions. Control dust at all times during the contract.

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Submit a DCIP to the engineer for review at least 14 calendar days before the preconstruction conference. Coordinate with the department, if requested, to resolve DCIP related issues before the preconstruction conference. The department will either approve the DCIP or request revisions. Do not initiate any land-disturbing activities without the department's approval of the DCIP.

C.2 DCIP Contents

Develop a DCIP tailored to the specific needs of the project. Consider potential impacts to businesses and residences adjacent to the job site. Describe in detail all land disturbing, dust generating activities. Identify strategies to prevent, mitigate, and collect excess dust. Establish clear lines of communication with the engineer to ensure that all dust control issues can be dealt with promptly.

Include all of the following:

- 1. A single contact person with overall responsibility for the DCIP development as well as surveillance and remediation of job related dust. Provide:
 - Name, firm, address, and working-hours phone number.
 - Non-working-hours phone number.
 - Email address.
- 2. A site map locating project features, the job site boundaries, all ingress and egress points, air intakes and other dust-sensitive areas, and all public and private paved surfaces within and immediately adjacent to the job site. Show where specific land disturbing, dust generating activities will occur and, to the extent possible, where employing various dust control or prevention strategies.
- 3. A matrix, or plan, for each anticipated land disturbing, dust generating activity, showing the following:
 - Preventive measures that shall be employed.
 - The applicable contact person.
 - The contractor's timetable and surveillance measures used to determine when remediation is required.
 - The specific dust control and remediation measures that shall be employed. Identify the specific contract bid items that shall be used for payment. Indicate costs and practices that are incidental to the contract.
 - Both maintenance and cleanup schedules and procedures.
 - Excess and waste materials disposal strategy.
- 4. A description of monitoring and resolving off-site impacts.

C.3 Updating the DCIP

Update the DCIP during the contract or as the engineer directs. Obtain the engineer's approval for all DCIP alterations. Also obtain the engineer's approval for routine DCIP adjustments for weather, job conditions, or emergencies that will have an impact on payment under the bid items listed in the approved DCIP.

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C.4 Dust Control Deficiencies

Coordinate with engineer to determine deadlines for resolving dust control deficiencies. Deficiencies include actions or lack of actions resulting in excessive dust, failing to comply with the contractor's DCIP or associated special provisions, and failing to properly maintain equipment.

D Measurement

The department will measure the various bid items associated with dust control as specified in the applicable measurement subsections of either the standard specifications or other contract special provisions. The department will not measure work performed under a DCIP alteration unless the engineer specifically approves that alteration.

Measurement under the DCIP includes the contract bid items listed below:

| 623.0200 | Dust Control Surface Treatment |
|--------------|---------------------------------------|
| 624.0100 | Water |
| 628.7560 | Tracking Pads |
| SPV.0075.009 | Pavement Cleanup |

The department will measure work completed under other existing contract bid items if approved as a part of the DCIP. The department will consider new bid items to the contract if proposed under the DCIP. The department will not measure work required under the DCIP that is not included in contract bid items.

E Payment

All costs associated with the development and updating of the DCIP are incidental to the contract. The department will pay separately for the work required to implement the actions approved in the DCIP under the contract bid items approved as a part of the DCIP. All other costs associated with work approved under the DCIP are incidental to the contract. SEF Rev. 16 0414

25. Project Site Air Quality.

Because fine particulate matter levels for Milwaukee, Racine and Kenosha Counties are typically close to PM_{2.5} limits and the project is in a non-attainment area for the federal 8-hour ozone standard, contributions from construction activities can have a major impact well beyond the project limits. Take practical measures to mitigate the impact of operating construction equipment on the air quality in and around the project site.

Voluntarily establishing the staging zones for trucks waiting to load and unload is encouraged by the department. Locate staging zones where idling of diesel powered equipment will have minimal impact on abutting properties and the general public. The department will make signs available to help identify these zones. Have truckers queue up in these zones whenever it is practical. The department further encourages drivers to shut down diesel trucks as soon as it appears likely that they will be queued up for more than ten minutes. Notify employees and sub-contractors about fueling and engine idling.

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Portable Concrete Crusher Plants

Portable concrete crusher plants may need a NR 440 Concrete Crusher Plant Air Permit for air emissions. Please contact Wisconsin Department of Natural Resources to request additional information and permit application materials. Complete permit applications may take 3 months to process.

SEF Rev. 16 0929

26. Maintaining Drainage.

Maintain drainage at and through worksite during construction according to standard spec 107.22, 204, 205 and 520.

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

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

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

Dewatering (Mechanical Pumping) for treatment Water (sediment-laden) Operations If dewatering operations require pumping of water containing sediments (sand, silt, and clay particles), the discharge will not be allowed to leave the work site or discharge to a storm water conveyance system without sediment removal treatment. Refer to article Erosion Control in these special provisions for additional requirements. SEF Rev. 15 0209

27. Subletting the Contract.

Replace standard spec 108.1.1 (3) with the following:

If proposing to have a party other than a subcontractor perform work, notify the engineer and submit details of this arrangement in writing. The engineer will determine if that arrangement constitutes subcontracting. Submit copies of all other agreements between any parties regarding the performance of work under the contract with the Request to Sublet. SEF Rev. 14 1212

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28. CPM Progress Schedule.

Modify the standard specs as follows:

Submit a CPM Progress Schedule and updates according to standard spec 108.4.4, and as hereinafter provided.

To ensure compatibility with the Master Program Schedule, use the latest version of Primavera Project Planner (P6), by Primavera Systems, Inc., Bala Cynwyd, PA to prepare the Initial CPM Progress Schedule, Monthly CPM Progress Updates and other CPM Progress Revisions requested by the engineer.

Within five business days after award, the department will provide its current standard Work Breakdown Structure and activity codes to use to develop the Initial CPM Progress Schedule.

Designate a Project Scheduler who will be responsible for scheduling the Work and submit a professional resume describing a minimum of three years of scheduling experience on interstate-highway reconstruction work of similar size and complexity, including recent experience with P6. Obtain approval of the submitted resume prior to scheduling the work.

With each Monthly CPM Progress Schedule Update also include:

- 1. Activities underway and as-built dates for the past month.
- 2. On a monthly basis, agree on the as-built dates with the department depicted in the Monthly CPM Progress Schedule Update or document any disagreements. Use the as-built dates from the Monthly CPM Progress Schedule Update for the month when updating the CPM schedule.
- 3. Provide actual as-built dates for completed activities through final acceptance of the project.

SEF Rev. 14 1211

29. Force Account.

Supplement standard spec 109.4.5.1 (3)1 *with the following:*

Include accumulation of wages to date for each employee performing force account work and identify allowable Federal Unemployment Tax (FUTA) and State Unemployment Tax (SUTA) multipliers.

SEF Rev. 14 1211

30. Clearing and Grubbing, Emerald Ash Borer.

This applies to projects in the emerald ash borer (EAB) quarantined zones to include: Adams, Brown, Buffalo, Calumet, Columbia, Crawford, Dane, Dodge, Door, Douglas, Fond du Lac, Grant, Green, Iowa, Jackson, Jefferson, Juneau, Kenosha, Kewaunee, La Crosse, Lafayette, Manitowoc, Marquette, Milwaukee, Monroe, Oneida, Outagamie, Ozaukee,

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Portage, Racine, Richland, Rock, Sauk, Sheboygan, Trempealeau, Vernon, Walworth, Washington, Waukesha, Winnebago and Wood counties.

Supplement standard spec 201.3 with the following:

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

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

- a) Green ash (F. pennsylvanica) is found throughout the state, but is most common in southern Wisconsin. It may form pure stands or grow in association with black ash, red maple, swamp white oak, and elm. It grows as an associate in upland hardwood stands, but is most common in and around stream banks, floodplains, and swamps.
- b) Black ash (F. nigra) is distributed over the entire state but is most frequently found in northern Wisconsin. It is most common in swamps, but is also found in other wet forest types.
- c) Blue ash (F. quadrangulata) is a threatened species that is currently found only at a few sites in Waukesha County. The species is at the edge of its range in Wisconsin, but is common in states farther south. The species is not of commercial importance. Blue ash twigs are 4-sided.
- d) White ash (F. americana) tends to occur primarily in upland forests, often with Acer saccharum.

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

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

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

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

ATCP 21.17 Emerald ash borer; import controls and quarantine.

Importing or Moving Regulated Items from Infested Areas; Prohibition.

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

a) Import a regulated item under sub. (2) into this state if that item originates from an emerald ash borer regulated area identified in 7CFR 301.53-3.

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

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

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

- e) The emerald ash borer, Agrilus planipennis Fairmaire in any living stage.
- f) Ash trees.
- g) Ash limbs, branches, and roots.
- h) Ash logs, slabs or untreated lumber with bark attached.
- i) Cut firewood of all non-coniferous species.
- j) Ash chips and ash bark fragments (both composted and uncomposted) larger than one inch in diameter.
- k) Any other item or substance that may be designated as a regulated item if a DATCP pest control official determines that it presents a risk of spreading emerald ash borer and notifies the person in possession of the item or substance that it is subject to the restrictions of the regulations.

Regulatory Considerations

- a) The quarantine means that ash wood products may not be transported out of the quarantined area.
- b) Clearing and grubbing includes all ash trees that are to be removed from within the project footprint. If ash trees are identified within clearing and grubbing limits of the project, the following measures are required for the disposal:

Chipped Ash Trees

- May be left on site if used as landscape mulch within the project limits. If used as mulch on site, chips may not be applied at a depth greater than standard mulch applications as this will impede germination of seeded areas.
- m) May be buried on site within the right-of-way according to standard spec 201.3 (14).
- n) May be buried on adjacent properties to projects within the quarantined zone with prior approval of the engineer according to standard spec 201.3 (15).
- o) May be trucked to a licensed landfill within the quarantined zone with the engineer's approval according to standard spec 201.3 (15).
- p) Burning chips is optional if in compliance with standard spec 201.3.
- q) Chips must be disposed of immediately if not used for project mulching and may not be stockpiled and left on site for potential transport by others. Chips may be stockpiled temporarily if they will be used for project mulching and are not readily accessible to the public.
- r) Chipper equipment must be cleaned following post-chipping activities to ensure no spread of wood chip debris into non-quarantined counties.

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Ash logs, Branches, and Roots

- a) May be buried without chipping within the existing right-of-way or on adjacent properties according to standard spec 201.3 (14)(15).
- b) May be trucked to a licensed landfill within the quarantined zone with the engineer's approval according to standard spec 201.3 (15).
- c) Burning is optional if in compliance with standard spec 201.3.
- d) Ash logs, branches, and roots must be disposed of immediately and may not stockpiled.
- e) All additional costs will be incidental to clearing and grubbing items.
- f) Do not bury or use mulch in an area that will be disturbed again during later phases of the project.
- g) Anyone moving firewood or ash products from the state or these counties is subject to state and federal fines up to \$1,000.00. All fines are the responsibility of the contractor. Obtain updated quarantine information at the DNR Firewood Information Line at (800) 303-WOOD.

Furnishing and Planting Plant Materials

Supplement standard spec 632.2.2 with the following:

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

Updates for Compliance

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

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

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Regulated Items

More frequent updates, if any, are available on the DATCP website at www.datcp.state.wi.us. Subsection (1) applies to new regulated areas as those areas are identified in the CFR, regardless of whether affected persons receive update notices from DATCP. Persons may request update notices by calling (608) 224–4573, by visiting the DATCP website, or by writing to the above address. SER-201 (20160808)

31. Removing Wooden Bollards, Item 204.9060.S.001.

A Description

This special provision describes removing wooden bollards according to the pertinent provisions of standard spec 204 and as hereinafter provided.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Removing Wooden Bollards as each unit, acceptably completed.

E Payment

Add the following to standard spec 204.5:

| ITEM NUMBER | DESCRIPTION | UNIT |
|----------------|--------------------------|-------------|
| 204.9060.S.001 | Removing Wooden Bollards | EACH |

204-025 (20150630)

32. Removing Cover Plates Left in Place, Item 204.9060.S.002.

A Description

This special provision describes removing steel cover plates placed and left in place on storm sewer structures under previous contracts.

B (Vacant)

C (Vacant)

Excavate and carefully remove steel cover plates at locations shown on the plan or as directed by the engineer. Saw cuts may be required to remove cover plates. Do not damage storm sewer structures and pipes while removing cover plates.

D Measurement

The department will measure Removing Cover Plates left in Place as each unit, acceptably completed.

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E Payment

Add the following to standard spec 204.5:

ITEM NUMBERDESCRIPTIONUNIT204.9060.S.002Removing Cover Plates Left in PlaceEACH

204-025 (20150630)

33. Removing Concrete Median Sloped Nose, Item 204.9165.S.001.

A Description

This special provision describes Removing Concrete Median Sloped Nose 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 Concrete Median Sloped Nose by the square foot, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER DESCRIPTION UNIT 204.9165.S.001 Removing Concrete Median Sloped Nose SF

stp-204-025 (20150630)

34. Pavement Breaking Equipment.

Use only hydraulic pavement breaking equipment for breaking pavement within 300 feet of any structure. Do not use guillotine, drop hammer, falling weight, gravity impact breakers or equivalent equipment. A multi-head hydraulic drop hammer is allowed unless a structure is within 50 feet of the roadway.

SEF Rev. 14 0415

35. QMP Subgrade.

A Description

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

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- CTH K
- East and West Frontage Roads

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

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

B Materials

B.1 Quality Control Plan

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

Do not change the quality control plan without the engineer's review. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in the contractor's laboratory as changes are adopted. Ensure that the plan provides the following elements:

- 1. An organizational chart with names, telephone numbers, current certifications or titles, and roles and responsibilities of QC personnel.
- 2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication process that will be used, and action time frames.
- 3. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.
- 4. Location of the QC laboratory, retained sample storage, and control charts and other documentation.
- 5. A summary of the locations and calculated quantities to be tested under this provision.
- 6. An explanation regarding the basis of acceptance for material that cannot be tested by nuclear methods due to a high percentage of oversized particles.

B.2 Personnel

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

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B.3 Laboratory

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

Materials Laboratory 3502 Kinsman Boulevard Madison, Wisconsin 53704-2583 Telephone: (608) 246-7938

http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/qual-labs.aspx

B.4 Equipment

Furnish the necessary equipment and supplies for performing quality control testing. Ensure that all testing equipment conforms to the equipment specifications applicable to the required testing methods. The engineer may inspect the measuring and testing devices to confirm both calibration and condition. Calibrate all testing equipment according to the CMM and maintain a calibration record at the laboratory.

Furnish nuclear gauges from the department's approved product list at:

http://www.atwoodsystems.com/.

Ensure that the gauge manufacturer or an approved calibration service calibrates the gauge within 12 months before using it on the project. Retain a copy of the calibration certificate with the gauge. Nuclear density gauge calibration verification is required daily when earthwork construction operations require testing under this special provision article. This calibration verification shall be performed using the departments "Validator" apparatus which is located at the Field Office. Establish a standard gauge reading for the "Validator" using the ten test average method. The source emitter depth for calibration verification, in the direct transmission mode, will be determined by the engineer. This procedure will establish the "Validator" apparatus, as the contractor's project reference site.

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

B.5 Soil Source Study

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

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

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

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

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

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

B.6 Quality Control Documentation

B.6.1 Control Charts

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

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

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

Post control charts in an engineer-approved location and update daily. Ensure that the control charts include the project number, the test number, each test element, the applicable control limits, the contractor's individual test results, the running average of the last 4 data points, and the engineer's quality verification test data points. Use the control charts as part

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of a process control system for identifying potential problems and assignable causes. Format control charts according to the CMM.

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

B.6.2 Records

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

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

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

B.7 Contractor Testing

B.7.1 General

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

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

For each test, provide the cubic yards represented and the test location to within 2 feet horizontally and 0.5 feet vertically. Use project stationing to determine horizontal location and grade stakes to determine vertical location.

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

B.7.2 Field Density and Field Moisture

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

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

B.7.3 One-Point Proctor

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

B.7.4 Testing Frequency

B.7.4.1 Subgrade Embankment portions of the project, except within 200 Feet of bridge abutments

Perform the required tests at the following frequencies:

| Test | Minimum Frequency |
|-------------------|--|
| Field Density and | One per 2,000 cubic yards of fill per lift or one test |
| Moisture | per grading area per day whichever yields the most |
| (AASHTO T 310) | tests. |
| One-Point Proctor | One per 9,000 cubic yards or when a change in fill |
| (AASHTO T 272) | material occurs. |

B.7.4.2 Subgrade Embankment Within 200 Feet of Bridge Abutments

Perform the required tests at the following frequencies:

| Test | Minimum Frequency |
|-------------------|--|
| Field Density and | One per 1,000 cubic yards of fill per lift or one test |
| Moisture | per grading area per day whichever yields the most |
| (AASHTO T 310) | tests. |
| One-Point Proctor | One per 9,000 cubic yards or when a change in fill |
| (AASHTO T 272) | material occurs. |

B.7.4.3 Subgrade Cut

Perform the required tests at the following frequencies:

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

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

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

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

B.7.4.5 Structure and Granular Backfill at Bridge Abutments

Perform the required tests at the following minimum frequencies:

| Test | Minimum Frequency |
|-------------------|---|
| Field Density and | One test per 2 feet of vertical backfill height per |
| Moisture | abutment. |
| (AASHTO T 310) | |
| One-Point Proctor | One per 3,000 cubic yards or when a change in fill |
| (AASHTO T 272) | material occurs. |

B.7.5 Compaction Zones

B.7.5.1 Subgrade Embankment portions of the project, except within 200 Feet of bridge abutments

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

B.7.5.2 Subgrade Embankment Within 200 Feet of Bridge Abutments

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

B.7.5.3 Subgrade Cut

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

B.7.5.4 Subgrade Embankment in Culvert Pipe Trenches

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

B.7.5.5 Structure and Granular Backfill at Bridge Abutments

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

Also see plan notes identifying special compaction.

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B.7.6 Control Limits

B.7.6.1 Field Density

B.7.6.1.1 General Conditions

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

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

B.7.6.2 Field Moisture Content

B.7.6.2.1 general conditions

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

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

B.7.7 Corrective Action

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

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

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

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B.8 Department Testing

B.8.1 General

The department will conduct verification testing to validate the quality of the product and independent assurance testing to evaluate the sampling and testing. The department will provide the contractor with a listing of names and telephone numbers of all verification and independent assurance personnel for the project.

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

B.8.2 Verification Testing

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

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

The department will perform verification testing as follows:

- 1. The department will conduct verification tests on Proctor split samples taken by the contractor. These samples may be from the Soil Source Study or the one-point Proctor or sample locations chosen by the engineer from anywhere in the process. The minimum verification testing frequency is one per 90,000 cubic yards, with at least one for each soil type identified in the Soil Source Study.
- 2. The department will test the first split sample obtained by the contractor for the one-point Proctor. The engineer may select any contractor-retained sample for verification testing.
- 3. The department will conduct at least one verification test for field density and field moisture per 20,000 cubic yards.

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

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

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

B.8.3 Independent Assurance Testing

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

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

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

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

B.9 Dispute Resolution

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

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

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B.10 Acceptance

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

C (Vacant)

D (Vacant)

E Payment

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

SEF Rev. 15_0709

36. QMP Base Aggregate.

A Description

A.1 General

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

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A.2 Contractor Testing for Small Quantities

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

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

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

- 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:

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- 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:

| program (111 of) portorm swimping, vocang, and do camenation as fortons. | | |
|---|-----------------------------------|--|
| 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 | |

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

 $\underline{http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/qual-\underline{labs.aspx}}$

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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.
- Provide control charts to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:
 - 1. Contractor individual QC tests.
 - 2. Department OV 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.

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- (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.

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

B.6.3 Liquid Limit and Plasticity

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

B.7 Corrective Action

B.7.1 General

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

B.7.2 Placement Corrective Action

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

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

B.8 Department Testing

B.8.1 General

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

B.8.2 Verification Testing

B.8.2.1 General

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

B.8.3 Independent Assurance

(1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform an IA review

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according to the department's independent assurance program. That review may include one or more of the following:

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

B.9 Dispute Resolution

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

C (Vacant)

D (Vacant)

E Payment

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

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(2) For material represented by a running average exceeding a control limit, the department will reduce pay by 10 percent of the contract price for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.
301-010 (20151210)

37. Select Crushed Material.

Replace standard spec 312.2(6) with the following:

The department will assess Select Crushed Material acceptability based primarily on the engineer's visual inspection. The department may require the contractor to sample, test, and report gradation or the fracture results to show conformance of the material. One test per source, production process or change of production process may be required.

Replace standard spec 312.5(2) with the following:

Payment for Select Crushed Material is full compensation for providing and compacting Select Crushed Material and all work necessary to provide gradation or fracture test results. SER-312.1 (20160831)

38. QMP Base Aggregate Dense 1 1/4-Inch Compaction, Item 371.1000.S.

A Description

- (1) This special provision modifies the compaction and density testing and documentation requirements of work done under the Base Aggregate Dense 1 1/4-Inch bid items. Conform to standard spec 305 as modified in this special provision and to the contract QMP Base Aggregate article.
- Provide and maintain a quality management program. A quality management program is defined as all activities, including process control, inspection, sampling and testing, and necessary adjustments in the process related to construction of dense graded base which meets all the requirements of this provision.
- (3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:

 http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-

rsrces/rdwy/default.aspx

(4) This special provision applies to Base Aggregate Dense 1 1/4-Inch material placed on the mainline traveled way and adjacent mainline shoulders according to the typical finished sections. Unless otherwise specified by the contract, all Base Aggregate Dense 1 1/4-Inch material placed on side roads, private and public entrances, ramps, tapers, turn lanes, and other locations not described as the mainline traveled way and its adjacent

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mainline shoulders is exempt from the compaction and density requirement modifications and testing contained within this special provision.

B (Vacant)

C Construction

C.1 General

(1) The engineer shall approve the grade prior to placement of the base. Approval of the grade shall be according to applicable provisions of the standard specifications.

Add the following to standard spec 305.3.2.2:

(3) Compact the 1 1/4-Inch dense graded base to a minimum of 93.0% of the material target density. Ensure that adequate moisture is present during placement and compaction operations to prevent segregation and to help achieve compaction.

The material target density will be identified using one of the following methods:

- 1. For 1 1/4-Inch dense graded base composed of ≤20% reclaimed asphaltic pavement (RAP) or crushed concrete (RCA), as determined by classification of material (aggregate or RAP and/or RCA) and percentage by weight of each material type retained on the No. 4 Sieve: maximum dry density according to AASHTO T-180, Method D, with correction for coarse particles as determined by AASHTO T224, and modified to require determination of Bulk Specific Gravity (G_m) according to AASHTO T 85. Bulk Specific Gravities determined according to standard spec 106.3.4.2.2 for aggregate source approval may be utilized
- 2. For 1 1/4-Inch dense graded base composed of >20% RAP or RCA, as determined by classification of material (aggregate or RAP and/or RCA) and percentage by weight of each material type retained on the No. 4 Sieve, the contractor may choose from the following options:
 - a. Maximum dry density as determined by AASHTO T-180, Method D, with correction for coarse particles as determined by AASHTO T224, and modified to require determination of Bulk Specific Gravity (G_m) according to AASHTO T 85.
 - b. Maximum wet density as determined by AASHTO T-180, Method D, modified to define *Maximum Density* as the wet density in pounds per cubic foot of soil at optimum moisture content using Method D specified compaction, with correction for coarse particles as determined by AASHTO T224, and modified to require determination of Bulk Specific Gravity (G_m) according to AASHTO T 85.

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- c. Average of 10 random control strip wet density measurements as described in section C.2.5.1.
- (4) Base Aggregate Dense 1 1/4-Inch will be accepted for compaction on a target density lot basis.
- (5) Field density tests on materials using contractor elected target density methods C.1(3).2.b or C.1(3).2.c will not be considered for lot acceptance on the basis of compaction under the requirements of this provisions until the moisture content of the in-place material is less than 2.0 percentage points above the maximum wet density optimum moisture or 2.0 percentage points of the average moisture content of the 10 density tests representing a control strip, respectively.

C.2 Quality Management Program

C.2.1 Quality Control Plan

- (1) Submit a comprehensive written quality control plan to the engineer no later than 10 business days before placement of material. Do not place any dense graded base before the engineer reviews and accepts the plan. Construct the project as the plan provides.
- (2) Do not change the quality control plan without the engineer's review and acceptance. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in the contractor's laboratory as changes are adopted. Ensure that the plan provides the following elements:
 - 1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
 - 2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication process that will be used, and action time frames.
 - 3. A list of source locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
 - 4. Descriptions of stockpiling and hauling methods.
 - 5. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.
 - 6. Location of the QC laboratory, retained sample storage, and other documentation.
 - 7. A summary of the locations and calculated quantities to be tested under this provision.
 - 8. A description of placement methods and operations. Including, but not limited to: staging, construction of an initial working platform, lift thicknesses, and equipment.

C.2.2 Pre-Placement Meeting

A minimum of two weeks prior to the start of placement of Base Aggregate Dense 1 ¼-Inch material, hold a pre-placement meeting at a mutually agreed upon time and location. Present the Quality Control Plan at the meeting. Attendance at the pre-placement meeting is

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mandatory for the project superintendent, quality control manager, project inspection and testing staff, all appropriate contractor personnel involved in the sampling, testing, and quality control including subcontractors, and the engineer or designated representatives.

C.2.3 Personnel

- (1) Perform the quality control sampling, testing, and documentation required under this provision using technicians certified by the department's Highway Technician Certification Program (HTCP). Have a HTCP Nuclear Density Technician I, or ACT certified technician, perform field density and field moisture content testing.
- (2) If an ACT is performing sampling or testing, a certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

C.2.4 Equipment

- (1) Furnish the necessary equipment and supplies for performing quality control testing. Ensure that all testing equipment conforms to the equipment specifications applicable to the required testing methods. The engineer may inspect the measuring and testing devices to confirm both calibration and condition. Calibrate all testing equipment according to the CMM and maintain a calibration record at the laboratory.
- (2) Furnish nuclear gauges from the department's approved product list at:

 http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/default.aspx
- (3) Ensure that the nuclear gauge manufacturer or an approved calibration service calibrates the gauge the same calendar year it is used on the project. Retain a copy of the calibration certificate with the gauge.
- (4) For all target density methods, conform to ASTM D 6938 and CMM 8.15 for wet density testing and gauge monitoring methods.
- (5) For the specified target density determined using method C.1(3).1, compute the dry densities for the compacted dense graded base, composed of ≤20% RAP or RCA, according to ASTM D 6938.
- (6) For contractor elected target density method C.1(3).2.a compute dry densities of dense graded base composed of >20% RAP or RCA using a moisture correction factor and the nuclear wet density value. Determine the moisture correction value, for each Proctor produced under the requirements of C.2.5, using the moisture bias as shown in CMM 8.15.12.1 and 8.15.12.2, except the one-point Proctor tests of the 5 random tests is not required. Conduct a moisture bias test for every 9000 tons of Base Aggregate Dense 1 ½ -Inch placed. Determine natural moistures in the laboratory.

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(7) Perform nuclear gauge measurements using gamma radiation in the backscatter or direct transmission position on the same date of placement of the Base Aggregate Dense 1 1/4-Inch material. Backscatter may be used only if the material being tested cannot reliably maintain an undistorted direct transmission test hole. Direct transmission tests must be performed at the greatest possible probe depth of 2 inches, 4 inches, or 6 inches, but not to exceed the depth of the compacted layer being tested. Perform each test for 4 minutes of nuclear gauge count time.

C.2.5 Contractor Testing

- (1) Perform compaction testing on the mainline dense graded base material, as defined by A.(4). Perform the quality control sampling, testing, and documentation required under this provision using HTCP certified technicians as required in C.2.3. Conform to CMM 8.15 for testing and gauge monitoring methods.
- (2) Select test sites randomly using ASTM Method D3665. Do not test less than 1 ½ feet from the unsupported edge of the dense graded base layer. Test sites must be located within the mainline traveled way or the traveled way's adjacent mainline shoulder.

C.2.5.1 Contractor Required Quality Control (QC) Testing

- (1) Conduct testing at a minimum frequency of one test per lot. A lot will consist of each 1500 tons for each layer with a minimum lift thickness of 2" of Base Aggregate Dense 1 1/4-Inch material placed, regardless of the location of placement. Each lot of in-place mainline, as defined by A.(4), Base Aggregate Dense 1 1/4- Inch material compacted will be accepted when the lot field density meets the required minimum 93.0% of target density. Lots that don't achieve 93.0% of target density must be addressed and approved according to C.2.7.
- Notify the engineer, if a lot field density test falls below the required minimum value. Document and perform corrective actions according to C.2.7. Deliver documentation of all compaction testing results to the engineer at the time of testing.

C.2.5.1.1 Target Density Determination C.2.5.1.1.1 Density Control Strip Method

- (1) For contractor elected target density method C.1(3).2.c, construct a control strip for each layer of placement to identify the target wet density for the base aggregate dense material. The control strip construction and density testing will occur under the direct observation and/or assistance of the department QV personnel.
- (2) Unless the engineer approves otherwise, construct control strips to a minimum dimension of 300 feet long and one full lane width.
- (3) Completed control strips may remain in-place to be incorporated into the final roadway cross-section

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- (4) Construct additional control strips, at a minimum, when:
 - 1. The four point moving average gradation on any one sieve differs from the original gradation test result for that sieve by more than 10 percentage points. The original gradation test is defined as the gradation of the material used to construct the control strip. A previously determined Proctor value will remain valid for any material with gradation for all sieves within 10.0 percentage points of that Proctor's original gradation test.
 - 2. The source of base aggregate changes.
 - 3. The four point moving average percentage of blended recycled materials, from classification of material retained on the No. 4 sieve in the original gradation test, differs by more than 10 percentage points. The original gradation test is defined as the gradation of the material used to construct the control strip. A previously determined Proctor value will remain valid for any material with gradation for all sieves within 10.0 percentage points of that Proctor's original gradation test.
 - 4. The layer thickness changes more than 2.0 inches.
 - 5. The percent target density exceeds 103.0% on two consecutive density measurements.
- (5) Construct control strips using equipments and methods representative of the operations to be used to place and compact the remaining 1 1/4–Inch Base Aggregate Dense material. Wet the base, as mutually agreed upon by the contractor and engineer, to obtain and/or maintain adequate moisture content to ensure proper compaction. Discontinue water placement if the base begins to exhibit signs of saturation or instability.
- (6) After compacting the control strip with a minimum of 2 passes, mark and take density measurements at 3 random locations, at least 1 ½ feet from the edge of the base. Subsequent density measurements will be taken at the same 3 locations.
- (7) After each subsequent pass of compaction equipment over the entirety of the control strip, take density measurements at the 3 marked locations. Continue compacting and testing until the increase in density measurements is less than 2.0 lb/ft³, or the density measurements begin to decrease.
- (8) Upon completion of control strip compaction, take 10 randomly located density measurements within the limits of the control strip, at least 1 ½ feet from the edge of the base. The final measurements recorded at the 3 locations under article C.2.4.1.1.1(6) may be included as 3 of the 10 measurements. Average the ten measurements to obtain the control strip target density and target moisture for use in contractor elected method C.1(3).2.c.

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C.2.5.1.1.2 Maximum Wet and/or Dry Density Methods

- (1) For contractor elected target density methods C.1(3).2.a, C.1(3).2.b, and contractually specified target density method C.1(3).1; perform one gradation and 5-point Proctor test before placement of 1 1/4-Inch dense graded base. Perform additional gradations every 3000 tons. If sampling requirements are identical, samples/testing performed for the QMP Base Aggregate specification may be used to fulfill the gradation testing requirements of this specification.
- (2) Perform additional 5-point Proctor tests, at a minimum, when:
 - 1. The four point moving average gradation on any one sieve differs from the original gradation test result for that sieve, by more than 10 percentage points. The original gradation test is defined as the gradation of the material used to create a 5-point Proctor. Each 5-point Proctor test will remain valid for any material with gradation for all sieves within 10.0 percentage points of that Proctor's original gradation test.
 - 2. The source of base aggregate changes.
 - 3. The four point moving average percentage of blended recycled materials; from classification of material retained on the No. 4 sieve; in the original gradation test, differs by more than 10 percentage points. The original gradation test is defined as the gradation of the material used to construct the control strip. A previously determined Proctor value will remain valid for any material with gradation for all sieves within 10.0 percentage points of that Proctor's original gradation test
 - 4. Percent target density exceeds 103.0% on two consecutive density tests.
- (3) Provide Proctor test results to the engineer within 48 hours of sampling. Provide gradation test results to the engineer within 24 hours of sampling.
- (4) Split each contractor QC Proctor sample and identify it according to CMM 8.30. Deliver the split to the engineer within one business day for department QV Proctor testing.
- (5) Split each non-Proctor 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.

C.2.5.2 Optional Contractor Assurance (CA) Testing

- (1) CA Testing is optional and is conducted to further validate QC testing. The contractor may submit recorded CA data to provide additional information for the following:
 - 1. Process control decisions
 - 2. Troubleshooting possible sampling, splitting, or equipment problems.

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C.2.6 Department Testing

C.2.6.1 General

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

C.2.6.2 Quality Verification (QV) Testing

- (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 C.2.3 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 at the minimum frequency of 30% of the required gradation, density and Proctor contractor tests.
- (3) The department will utilize contractor's QC Proctor results for determination of the material target density. The department will verify QC Proctor values by testing QC Proctor split sample. The department will use QC Proctor value as a target density if the QC and QV Proctor test results meet the tolerance requirements specified in section 2.6.2.(7).
- (4) The department will locate gradation and nuclear density test samples, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will split each QV sample, test half for QV, and retain the remaining half for 7 calendar days.
- (5) 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.
- (6) The department will utilize control strip target density testing results in lieu of QV Proctor sampling and testing when the contractor elected C.1 (3).2.c target density method is used.
- The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to this special provision, the department will take no further action. If QV test results are nonconforming, take corrective actions according to C.2.7 until the requirements of this special provision are met. Differing QC and QV nuclear density values of more than 2.0 pcf will be investigated and resolved. Differing QC and QV Proctor values of more than 3.0 pcf will be investigated and resolved.

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C.2.6.3 Independent Assurance (IA)

- (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. 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 C.2.6.4.

C.2.6.4 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 shall review the data, examine data reduction and analysis methods, evaluate sampling and testing methods/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 project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product or work, 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.2.7 Corrective Action

(1) Lots not achieving 93.0% of target density may be addressed and accepted for compaction according to the requirements of this section. Unless otherwise stated, the actions taken to address an unacceptable lot must be applied to the entire lot.

Passing CA test results according to section C.2.5.2 will reduce the limits of lot investigations and/or corrective actions.

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- (2) At no additional cost to the department, investigate the moisture content of material in an unacceptable lot. Moisture content testing/samples collected under the QC and/or QV testing articles of this specification may be used to complete this investigation. Obtain moisture content readings according to ASTM D 6938. For material composed of >20% RAP or RCA, correct the moisture content with the moisture correction value using the moisture bias, as shown in CMM 8.15.12.1 and 8.15.12.2, except the one-point Proctor tests of the 5 random tests is not required.
- (3) Lots with moisture contents within 2.0 percentage points of optimum moisture for target density methods C.1(3).1, C.1(3).2.a, or C.1(3).2.b, or within 2.0 percentage points of the target moisture content for target density method C.1(3).2.c, and exhibiting no signs of deflection when subjected to loading by the heaviest roller used in the placement and compaction operations, shall be, at no additional cost to the department, compacted a minimum of one more pass using equipment and methods representative of the operations used to place and compact the Base Aggregate Dense 1 1/4–Inch, and density tested at the same location (station and offset) as the failing QC and/or QV density tests. If the change in density exceeds 2.0 lb/ft³ continue subsequent compactive efforts and density testing on that lot, at no additional cost to the department. If the change in density is less than or equal to 2.0 lb/ft³, the lot is accepted as satisfying the compaction requirements of this provision.
- (4) Lots with moisture contents within 2.0 percentage points of optimum moisture for target density methods C.1 (3).1, C.1 (3).2.a, or C.1 (3).2.b, or within 2.0 percentage points of the target moisture content for target density method C.1 (3).2.c, and exhibiting signs of deflection when subjected to loading by the heaviest roller used in the placement and compaction operations, will be reviewed by the engineer. The engineer may request subgrade improvement methods, such as excavation below subgrade (EBS), installation of geotextile fabrics, installation of breaker run material or others to be completed and paid for as specified in standard spec 301.5, or may request, at no additional cost to the department, an additional pass of compactive effort using equipment and methods representative of the operations used to place and compact the base aggregate dense and density test.
 - 1. If, after an additional pass, the change in density at the same location (station and offset) as the failing QC and/or QV density tests exceeds 2.0 lb/ft³ in a lot continue subsequent compactive efforts and density testing on that lot, at no additional cost to the department. If the change in density at the same location (station and offset) as the failing QC and/or QV density tests is less than or equal to 2.0 lb/ft³, and subgrade improvement methods are not requested by the engineer, the lot is accepted as satisfying the compaction requirements of this provision.
 - 2. If subgrade improvement methods are requested by the engineer, upon completion, including compaction of the restored base material, conduct a density test within the improved subgrade limits. This density test result will replace the prior field density value. If the lot field density equals or exceeds

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93.0% of target density the lot is accepted as satisfying the compaction requirements of this provision. If the lot field density fails to achieve 93.0% of target density, at no additional cost to the department, compact the lot a minimum of one more pass using equipment and methods representative of the operations used to place and compact the base aggregate dense; and density test at the same location (station and offset) as the failing QC and/or QV density tests. If the change in density exceeds 2.0 lb/ft³ continue subsequent compactive efforts and density testing on that lot, at no additional cost to the department. If the change in density is less than or equal to 2.0 lb/ft³, the lot is accepted as satisfying the compaction requirements of this provision.

- Unacceptable lots, with moisture contents in excess of 2.0 percentage points above or below optimum moisture for target density methods C.1(3).1, C.1(3).2.a, or C.1(3).2.b; or in excess of 2.0 percentage points above or below the target moisture content for target density method C.1(3).2.c; shall receive contractor performed and documented corrective action; including additional density testing; at no additional cost to the department.
- (6) Density tests completed subsequent to any corrective action will replace previous field density test results for that lot. Continue corrective actions until 93.0% of target density is achieved or an alternate compaction acceptance criteria is met according to this section.
- (7) Field moisture contents of materials tested using contractor elected target density methods C.1(3).2.b or C.1(3).2.c cannot exceed 2.0 percentage points of the optimum moisture content or 2.0 percentage points of the target moisture content, respectively. Density tests on materials using contractor elected target density methods C.1(3).2.b or C.1(3).2.c will not be considered for lot compaction acceptance until the moisture content of the corresponding density test of the in-place material is less than 2.0 percentage points above of the optimum moisture content or 2.0 percentage points of the target moisture content, respectively.

D Measurement

(1) The department will measure QMP Base Aggregate Dense 1 1/4-Inch Compaction by the ton, acceptably completed. The measured tons of QMP Base Aggregate Dense 1 1/4-Inch Compaction equals the tons of Base Aggregate Dense 1 1/4-Inch, acceptably completed, regardless of placement location and density testing eligibility.

E Payment

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

ITEM NUMBER

DESCRIPTION

QMP Base Aggregate Dense 1 ½-Inch

Compaction

UNIT

TON

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Payment is full compensation for performing compaction testing; for sampling and laboratory testing; and for developing, completing, and documenting the compaction quality management program. The department will pay separately for providing the aggregate under the Base Aggregate Dense 1 1/4-Inch bid item. 370-010 (20151210)

39. Cold Patch, Item 495.1000.S.

A Description

This special provision describes furnishing cold patch and filling potholes and other voids in existing pavement surfaces as the engineer directs.

B Materials

Furnish a mixture of course aggregate, natural sand, and MC-250 bituminous material designed to have a workability range of 15-100° F without heating. Ensure that the mixture:

- Adheres to wet surfaces.
- · Resists damage from water, salt, and deicing products.
- Requires no mixing or special handling before use.
- · Supports traffic immediately after placement and compaction.

Conform to the following gradation:

| SIEVE SIZE | PERCENT PASSING (by weight) | | |
|--------------------|-----------------------------|--|--|
| 1/2-inch (12.5 mm) | 100 | | |
| 3/8-inch (9.5 mm) | 90 - 100 | | |
| No. 4 (4.75 mm) | –90 max | | |
| No. 8 (2.38 mm) | 20 - 65 | | |
| No. 200 (0.074 mm) | 2 - 10 | | |
| Bitumen | 4.8 - 5.4 | | |

The department will accept cold patch based primarily on the engineer's visual inspection. The department may also test for gradation.

C Construction

Stockpile cold patch on site on a smooth, firm, well-drained area cleared of vegetation and foreign material. Cover the stockpile and ensure that it is easily accessible. Replenish the stockpile throughout the project duration, but limit the size at any given time to 10 tons on site unless the engineer approves otherwise. Dispose of unused material at project completion unless the engineer directs otherwise.

Place cold patch by hand. Remove ponded water and loose debris before placement. Compact flush with a tamper, roller, or vehicle tire after placement.

Refill patched areas as necessary to maintain a flush pavement surface until project completion.

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D Measurement

The department will measure Cold Patch by the ton, acceptably stockpiled on site.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 495.1000.S Cold Patch TON

Payment for Cold Patch is full compensation for providing and maintaining patches; for furnishing and replenishing stockpiled material on-site; and for disposing of excess material at project completion. 495-010 (20160607)

40. Cover Plates Temporary, Item 611.8120.S.

A Description

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

B Materials

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

C (Vacant)

D Measurement

The department will measure Cover Plates Temporary as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNIT611.8120.SCover Plates TemporaryEach

Payment is full compensation for furnishing, installing, and removing the cover plates.

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

611-006 (20151210)

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41. Pipe Grates, Item 611.9800.S.

A Description

This special provision describes furnishing and installing pipe grates on the ends of pipes as shown in the plans, and as hereinafter provided.

B Materials

Furnish steel conforming to the requirements of standard spec 506.2.2.1. Furnish steel pipe conforming to the requirements of standard spec 506.2.3.6.

Furnish pipe grates galvanized according to ASTM A123.

Furnish angles and brackets galvanized according to ASTM A123.

Furnish required hardware galvanized according to ASTM A153.

C Construction

Repair pipes, rods, angles and brackets on which the galvanized coating has been damaged according to the requirements of AASHTO M36M.

D Measurement

The department will measure Pipe Grates in units of work, where one unit is one grate, completed and accepted.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 611.9800.S Pipe Grates EACH

Payment is full compensation for furnishing and installing all materials; and for drilling and connecting grates to pipes.

611-010 (20030820)

42. Fence Safety, Item 616.0700.S.

A Description

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

B Materials

Furnish notched conventional metal "T" or "U" shaped fence posts.

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Furnish fence fabric meeting the following requirements:

Color: International orange (UV stabilized)

Roll Height: 4 feet

Mesh Opening: 1 inch min to 3 inch max

Resin/Construction: High density polyethylene mesh

Avg. 2000 lb per 4 ft. width (ASTM D638) Tensile Yield: Ultimate Tensile Strength: Avg. 3000 lb per 4 ft. width (ASTM D638)

Greater than 100% (ASTM D638) Elongation at Break (%): Chemical Resistance: Inert to most chemicals and acids

C Construction

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

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

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

D Measurement

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

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 616.0700.S Fence Safety LF

Payment is full compensation for furnishing and installing fence and posts; maintaining the fence and posts in satisfactory condition; and for removing and disposing of fence and posts at project completion. 616-030 (20160607)

43. Sign Supports Concrete Masonry.

Modify the standard specs as follows:

Supplement standard spec 636.3.2 with the following:

(3) Drill or excavate and maintain a stable open excavation for subsequent installation of drilled footings for sign structure foundations as shown in the plans. The subsurface conditions vary across the project site and are not necessarily the same at each sign structure foundation in the project. Anticipate the possibility of encountering randomly interlaced seams of loose, permeable sand or gravel of substantial thickness situated within glacial clays and till deposits; saturated soils; ground water; isolated cobbles or boulders; and nested cobbles and boulders at any sign structure foundation when

1030-11-71 65 of 101 selecting equipment and methods for drilling or otherwise excavating. Partial or full depth temporary casing may be required to maintain the stability of the excavation prior to placement of reinforcement and filling the excavation with concrete.

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

Supplement standard spec 636.3.3 with the following:

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

Replace standard spec 636.5.2(1) with the following:

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

SEF Rev. 14 1212

44. Covering Signs.

Modify the standard specs as follows:

Replace standard spec 643.2.9.5 (2) with the following:

Ensure that covers are flat black, blank and opaque.

Supplement standard spec 643.3.8.2(1) with the following:

- Place rivets or screws at the corners of each sign cover. Space additional rivets or screws ≥ 12" apart to minimize damage to the sign.

Supplement standard spec 643.3.8.2(3) with the following:

If multiple messages on a single sign are required to be covered, minimize the number of holes created for aluminum rivets, aluminum self-tapping screws, or wood screws by covering the sign with a single rectangular shaped covering. Multiple coverings on a single sign is only permissible where necessary to avoid covering necessary content or as directed by the engineer. Submit sign covering plans to the engineer for single signs requiring multiple coverings 3 days before performing work. Obtain engineer approval before

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covering signs. Remove any sign coverings before placing fixed messages signs unless directed by the engineer.

SEF Rev. 16 1003

45. Traffic Control.

Supplement standard spec 643.3.1 with the following:

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

Place traffic control devices for work in the proper location before operations proceed. Traffic Control is subject to change at the direction of the engineer in the event of an emergency.

Provide the Racine County Sheriff's Department, the Wisconsin State Patrol, Village of Caledonia Police 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.

Do not park or store equipment, contractor's and personal vehicles or construction materials within the clear zone as designated in the plans on any roadway carrying traffic during working and non-working hours except at locations and periods of time approved by the engineer.

Do not permit construction or personnel equipment or vehicles to directly cross the live traffic lanes of the freeway. Yield to all through traffic at all locations. Equip all vehicles or equipment operating in the live traffic lanes with a hazard identification beam (flashing yellow signal light) that is visible from 360 degrees. Operate the flashing yellow beam only when merging or exiting live traffic lanes or when parked or operating on shoulders. Do not park personal vehicles within the access control limits of the freeway. Do not cross live freeway traffic lanes with equipment or vehicles

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

Do not disturb, remove or obliterate any traffic control signs, advisory signs, sand barrel array, shoulder delineators or beam guard in place along the traveled roadways without the approval of the engineer.

Do not use flag persons to direct, control, or stop freeway traffic. Obtain approval from the engineer to use a flag person to direct, control, or stop local street traffic. Adhere to the Manual of Uniform Traffic Control Devices chapter 6E standard requirements for flagger control.

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Replace standard spec 643.3.1(6) with the following:

Provide 24-hour a day availability of equipment, forces and materials to promptly restore barricades, lights, or other traffic control devices that are damaged or disturbed. SER-643.1 (20160831)

46. Traffic Control Signs Removal.

Supplement standard spec 643.3.8.3 with the following:

Remove all signs on temporary mounts and other potential associated hazards to the traveling public from the right-of-way when not in use. SEF Rev. 14 1212

47. Nighttime Work Lighting-Stationary.

A Description

Provide portable lighting as necessary to complete nighttime work. Nighttime operations consist of work specifically scheduled to occur after sunset and before sunrise.

B (Vacant)

C Construction

C.1 General

This provision shall apply when providing, maintaining, moving, and removing portable light towers and equipment-mounted lighting fixtures for nighttime stationary work operations, for the duration of nighttime work on the contract.

At least 14 days prior to the nighttime work, furnish a lighting plan to the engineer for review and acceptance. Address the following in the plan:

- 1. Layout, including location of portable lighting lateral placement, height, and spacing. Clearly show on the layout the location of all lights necessary for every aspect of work to be done at night.
- 2. Specifications, brochures, and technical data of all lighting equipment to be used.
- 3. The details on how the luminaires will be attached.
- 4. Electrical power source information.
- 5. Details on the louvers, shields, or methods to be employed to reduce glare.
- 6. Lighting calculations. Provide illumination with average to minimum uniformity ratio of 5:1 or less throughout the work area.
- 7. Detail information on any other auxiliary equipment.

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C.2 Portable Lighting

Provide portable lighting that is sturdy and free standing and does not require any guy wires, braces, or any other attachments. Furnish portable lighting capable of being moved as necessary to keep up with the construction project. Position the portable lighting and trailers to minimize the risk of being impacted by traffic on the roadway or by construction traffic or equipment. Provide lightning protection for the portable lighting. Portable lighting shall withstand up to 60 mph wind velocity.

If portable generators are used as a power source, furnish adequate power to operate all required lighting equipment without any interruption during the nighttime work. Provide wiring that is weatherproof and installed according to local, state, federal (NECA and OSHA) requirements. Equip all power sources with a ground-fault circuit interrupter to prevent electrical shock.

C.3 Light Level and Uniformity

Position (spacing and mounting height) the luminaires to provide illumination with an average to minimum uniformity ratio of 5:1 or less throughout the work area.

Illuminate the area as necessary to incorporate construction vehicles, equipment, and personnel activities.

C.4 Glare Control

Design, install, and operate all lighting supplied under these specifications to minimize or avoid glare that interferes with all traffic on the roadway or that causes annoyance or discomfort for properties adjoining the roadway. Locate, aim, and adjust the luminaires to provide the adequate level of illumination and the specified uniformity in the work area without the creation of objectionable glare.

Provide louvers, shields, or visors, as needed, to reduce any objectionable levels of glare. As a minimum, ensure the following requirements are met to avoid objectionable glare on the roadways open to traffic in either direction or for adjoining properties:

- 1. Aim tower-mounted luminaires, either parallel or perpendicular to the roadway, so as to minimize light aimed toward approaching traffic.
- 2. Aim all luminaires such that the center of beam axis is no greater than 60 degrees above vertical (straight down).

If lighting does not meet above-mentioned criteria, adjust the lighting within 24 hours.

C.5 Continuous Operation

Provide and have available sufficient fuel, spare lamps, generators, and qualified personnel to ensure that the lights will operate continuously during nighttime operation. In the event of any failure of the lighting system, discontinue the operation until the adequate level of illumination is restored. Move and remove lighting as necessary.

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D (Vacant)

E Payment

Costs for furnishing a lighting plan, and for providing, maintaining, moving, and removing portable lighting, tower mounted lighting, and equipment-mounted lighting required under this special provision are incidental to the contract. 643-010 (20100709)

48. Removing Pavement Markings Water Blasting, Item 646.0690.S.

A Description

This special provision describes removing pavement markings by water blasting. Conform to standard spec 646 and 647 as modified in this special provision.

B (Vacant)

C Construction

Use water blasting to remove the following:

- Markings in areas of temporary traffic shifts.
- Markings on bridge decks.
- Temporary markings on the final pavement surface.
- Where existing pavement is to remain and existing markings are in conflict with the final condition.
- Other locations as shown on the plan or directed by the engineer.

Completely remove pavement marking using a truck mounted ultra high pressure pump and water tank capable of delivering a minimum of 30,000 psi and up to 40,000 psi to waterjet nozzles. Use equipment with a vacuum recovery system that contains wastewater and debris to provide a clean, damp-dry surface, without a secondary cleanup operation. Do not scar or damage the pavement during the removal process. Limit water blasting to when the ambient temperature is at least 36 F and rising.

Properly dispose of the accumulated material off site.

D Measurement

The department will measure Removing Pavement Markings Water Blasting by the linear foot, up to a single 8-inch wide line, acceptably completed.

The department will measure Removing Special Pavement Markings Water Blasting as each individual arrow, symbol, or word, acceptably removed. The department will count removing an RXR symbol as three individual symbol removals.

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E Payment

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

following bid items:

ITEM NUMBER DESCRIPTION UNIT 646.0690.S Removing Pavement Markings Water Blasting LF

Payment is full compensation for removal and disposal of all materials. 646-075 (20160607)

49. Pavement Marking Grooved Contrast Wet Reflective Epoxy 4-Inch, Item 646.0842.S; 8-Inch 646.0844.S.

A Description

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

B Materials

Furnish a 20 mils application of modified epoxy binder pavement marking, from the Wisconsin's Approved Products List, in a grooved slot. Provide a double drop system of 5.3 pounds per gallon of wet reflective elements from Wisconsin's Approved Products List and Utah Performance beads mixture at a drop rate of 12-22 pounds per gallon.

Replace standard spec 646.2.3 (1) with the following:

50

Furnish Utah Performance beads with the following gradation:

US Mesh Percent Passing (ASTM D1214)

18 65-80

20
25
30 30-50
40

Utah Bead Gradation

Beads shall achieve a minimum of 275 mcd (dry reading), initial for white and 180 mcd (dry reading) for yellow.

0-5

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 the grooved wet reflective epoxy.

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Plane the grooved lines according to details in the plan. Use grooving equipment with a free-floating, independent cutting or grinding head. Plane a minimum number of passes to create a smooth groove. Remove lane line and center line pavement markings during the grooving process.

C.2 Groove Depth

Cut the groove to a depth of 80 mils ± 10 mils from the pavement surface. The department may periodically check groove depths.

C.4 Groove Width – Longitudinal Markings

Cut the groove 1inch wider than the width of the pavement marking.

C.5 Groove Position

Position the groove edge according to Standard Detail Drawing Pavement Marking (Mainline). If necessary, groove a minimum of 4 inches from both ends of the pavement marking segment. Achieve straight alignment with the grooving equipment.

C.6 Groove Cleaning

C.6.1 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 marking. Use a high-pressure air blower with at least 185 ft³/min air flow and 120 psi air pressure to clean the groove.

C.6.2 Asphalt

Groove pavement five or more days after paving.

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

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

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

D Measurement

The department will measure Pavement Marking Grooved Wet Reflective Epoxy (Width) bid items by the linear foot of line, acceptably completed.

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E Payment

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

| ITEM NUMBER | DESCRIPTION | UNIT |
|-------------|--|------|
| 646.0842.S | Pavement Marking Grooved Contrast Wet Reflective | LF |
| | Epoxy 4-Inch | |
| 646.0844.S | Pavement Marking Grooved Contrast Wet Reflective | LF |

Epoxy 8-Inch

Payment is full compensation for cleaning and preparing the pavement surface; furnishing and installing the epoxy, 3M elements and beads; and for removing existing or temporary marking, if necessary.

646-024 (20160607)

50. Signs Type I and II.

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

Add the following to standard spec 637.2.4:

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

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

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

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

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

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

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Add the following to standard spec 637.3.3.2(2):

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

Add the following to standard spec 637.3.3.3(3):

Furnish and install new aluminum vertical sign support beams on each sign and new U-bolts to attach each beam to the top and bottom cord of the sign bridge truss for Type I or Type II Signs and Type I signs on overhead sign supports incidental to sign. New I-beams are incidental to the sign being installed.

Add the following to standard spec 641.2.9(3):

Submit shop drawings for sign bridges and overhead sign supports to SE Region, Traffic Operations Engineer.

637-SER1 (20120401)

51. Lighting Systems.

General

Add the following to standard spec 651, 652, 653, 654, 655, 656, 657 and 659.

All the work necessary to comply with revisions to standards specifications mentioned herewith shall be incidental to associated pay items or to the project including coordination, materials, and labor. No additional payment shall be made to the contractor.

Add the following to standard spec 651.2:

Materials indicated to be returned to the department shall be hauled to one of the following two locations:

- State Electrical Shop at 935 South 60th street, West Allis, as directed by Ms. Bree Johns-Konkol, tel. (414) 266-1170, (414) 750-2814
- Milwaukee County Grounds, 10191 West Watertown Plank Road, Wauwatosa, as directed by Mr. Pat Stoetzel, tel. (414) 750-5306

Arrange pickups and deliveries three days in advance and during regular business hours (Monday – Thursday 7:00 AM to 3:45 PM).

Add the following to standard spec 651.3.1:

Any circuit that the contractor does not personally tag out at the disconnect shall be considered live, and will be subject to being activated by another person with no notice to the contractor. Make tagouts with manufactured tags, and endorse them with the date and the name of the contractor. Clear tagouts at the end of the workday. The department does

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not employ a load dispatcher and has no intent to do so. Each electrical worker is responsible for their own protection from automatic switching and from switching by others.

Add the following to standard spec 653.3(1):

This provision modifies the standard detail drawing for pull boxes and thereby both the standard items and SPV pay item for pull boxes. Lighting pull box covers shall read "LIGHTING".

Add the following to standard spec 655.3.1:

Wet location splices are not anticipated on this project and not shown in the plans. In the event that the engineer allows wet location splices, make pull box splices with engineer approved epoxy kit.

At each pull point or access point, indicate the line side bundle with a lap of blue tape.

Add the following to standard spec 655.3.7(4):

Where two or more wire networks pass through a pull point, tag each circuit network (i.e. A/B/N and C/D/N) with approved all-weather tags.

Add the following to standard spec 657.2:

Non-breakaway poles (mounted on structures, concrete bases or behind noise wall barriers without transformer base, as well as at stems of sign bridges) containing electrical wires are to be double nutted and contractor shall install galvanized rat screen enclosing the bottom of pole area; extra nuts and screen incidental.

Add the following to standard spec 657.3.1 and 657.3.5:

Corrosion protection measures described in standard spec 657.3.1 and 657.3.5 are invoked for breakaway transformer bases and aluminum light poles. The contractor shall avoid contact of dissimilar metals in erecting the pole on its foundation and/or breakaway device. Any concern of trapped moisture or potential corrosion cell shall be resolved to the satisfaction of the engineer.

Manufacturer's Warranty for LED luminaires: The manufacturer shall warrant to the department that each complete luminaire (consisting of the housing, optical assembly, LED drivers, surge protection and wiring) will be free from defects in material and workmanship for five years from the date that the luminaire are put into service. Luminaires shall be installed within one year of manufacture.

If any luminaires fail to meet the above warranty, the department will provide the manufacturer with a written notice of any defect within 30 days after discovery of the defect. The manufacturer shall provide all materials, luminaires, replacement component parts,

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labor and all incidentals necessary to restore the luminaire to a fully operational, installed condition.

52. General Requirements for Electrical Work.

Replace standard spec 651.3.3 (3) with the following:

(3) Request a signal inspection of the completed signal installation to the engineer at least five working days prior to the time of the requested inspection. Notify the department's Electrical Field Unit at (414) 266-1170 to coordinate the inspection. The department's Region Electrical personnel will perform the inspection. In the event of deficiencies, request a re-inspection when the work is corrected. The engineer will not authorize continuation to aboveground work or turn-on until the contractor corrects all deficiencies.

53. Section 652 Electrical Conduit.

Replace standard spec 652. 5 (2) with the following:

(2) Payment for Conduit Rigid Metallic, Conduit Rigid Nonmetallic, Conduit Reinforced Thermosetting Resin, and Conduit Special bid items is full compensation for providing the conduit, conduit bodies, and fittings; for providing all conduit hangers, clips, attachments, and fittings used to support conduit on structures; for pull wires or ropes; for expansion fittings and caps; for making necessary connections into existing pull box, manhole, junction box or communication vault; for excavating, bedding, and backfilling, including any sand, concrete, or other required materials; for disposing of surplus materials; and for making inspections.

54. Meter Breaker Pedestal Service CTH K & East Frontage Rd, Item 656.0200.001.

Append standard spec 656.2.3 with the following:

- (2) The department will be responsible for the electrical service installation request for any department maintained facility. Notify the maintaining authority if the signal is not state maintained that it is their responsibility to arrange for the electrical service installation.
- (3) Electrical utility company service installation and energy cost will be billed to and paid for by the maintaining authority.
- (4) Install the cabinet base and meter breaker pedestal first, so the electrical utility company can install the service lateral. Install a 3" conduit from the point of service from the utility to the meter breaker pedestal. Finish grade the service trench, replace topsoil that is lost or contaminated with other materials, fertilize, seed, and mulch all areas that are disturbed by the electrical utility company.

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Append standard spec 656.5 with the following:

(8) Payment is full compensation for grading the service trench; replacing topsoil; and for fertilizing, seeding, and mulching to restore the disturbed area of the service trench.

55. Field Facilities Office Space, Item SPV.0060.001.

A Description

This special provision describes furnishing, equipping, and maintaining a field office as required in the contract at engineer-approved locations conforming to standard spec 642 and as hereinafter provided.

B Materials

Provide Field Facilities Office Space conforming to standard spec 642.2.1 except revise by deleting paragraphs (1), (7), and (9).

Replace standard spec 642.2.1(4) with the following:

Provide and maintain suitable interior sanitary facilities conforming to State and local health requirements, in clean and good working condition, and stock with sanitary supplies for the duration of the contract. Furnish office space in an existing office building or existing building converted to office space with a minimum of 1200 square feet. The facility shall have no fee parking with a minimum parking for 15 cars. The space shall include a meeting room with a minimum of 350 square feet. The exterior door(s) shall have locks in good working order and keys provided for all field staff. The office space shall be located within 2 miles of the construction project.

Equip the office as specified in standard spec 642.2.2.1 except delete paragraph (1) and (4) and add the following:

- 1. 5 suitable office desks with drawers and locks.
- 2. 5 ergonomically correct office chairs in working condition with at a minimum: 5-legged base with casters, seat adjustable from 15 to 22 inches from the floor with a seamless waterfall, rounded, front edge, and high backrest with no arms or adjustable arms.
- 3. 4 six foot folding tables.
- 4. 1 ten foot folding table.
- 5. 5 two-drawer file cabinets.
- 6. 3 four-shelf bookcases.
- 7. 20 folding chairs.

Provide for the professional cleaning of the field office during regular business hours twice monthly. Provide clearly marked recycling and waste receptacles within the field office, and separate recycling and waste dumpsters near the field office. Cover outdoor containers to keep out rain, snow, and wind-driven debris. Provide regularly scheduled recycling and waste pick-up.

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C Construction

Conform to standard spec 642.3 except delete paragraph (2).

D Measurement

The department will measure the Field Facilities Office Space as each office, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060. 001Field Facilities Office SpaceEACH

Payment is full compensation for providing, equipping, securing, and maintaining the facility; for parking, for telecommunications equipment, installation, and service fees; and for providing bottled water, utilities, fuel, ventilation, and toilet facilities as required, either independently or jointly with the field laboratory, for the time specified in standard spec 642.3.

The department will pay for the cost of telecommunications usage fees incurred by department staff.

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56. Erosion Control Filter Bags, Item SPV.0060.005.

A Description

This special provision describes furnishing, installing, maintaining, and removing erosion control filter bags under other contract items at locations designated on the plans or as directed by the engineer, and according to plan details and as hereinafter provided.

B Materials

Bags shall be made of synthetic net with a mesh size of 1/8-inches by 1/8-inches that is of sufficient strength to hold the aggregate and to be lifted vertically.

Fill material shall be clean, sound, hard, durable coarse aggregate meeting the approval of the engineer and conforming to the size and gradation requirements for Size No. 1 coarse aggregate as specified in standard spec 501.2.5.4.4.

C Construction

Furnish bags filled with fill material as specified, secured to prevent loss of fill material during transportation, placement, maintenance and removal operations as hereinafter described. Completed erosion control filter bags shall have minimum in-place filled dimensions of 24-inches long by 12-inches wide by 6-inches high.

Install the erosion control filter bags as directed by the engineer and per plan detail. Place erosion control filter bags before starting any construction operation that may cause sedimentation or siltation at the site of the proposed filter bags.

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D Measurement

The department will measure Erosion Control Filter Bags by each individual erosion control filter bag, acceptably completed.

The department will not measure individual erosion control filter bags specified to be installed as part of silt fence drainage outlet protection. In those installations erosion control filter bags are part of and incidental to the appropriate bid items.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060. 005Erosion Control Filter BagsEACH

Payment is full compensation for furnishing all specified materials; for delivering, assembling, placing, maintaining, and removing and disposing erosion control filter bags; for removing and disposing of the accumulated sediments; and for repairing and restoring damaged areas.

The department will not pay for individual erosion control filter bags specified to be installed as part of silt fence drainage outlet protection. In those installations erosion control filter bags are part of and incidental to the appropriate bid items.

57. Removing Flashing Beacon and Pole Westbound (right) on CTH K east of East Frontage Road, SPV.0060.010; Westbound (left) on CTH K east of East Frontage Road, SPV.0060.011.

A Description

Work under this item shall consist of removing flashing beacon and pole and footing. The sign on the structure is paid for under a separate pay item, Removing signs type II. See signing plans for location. This is the pole and beacon for the STOP AHEAD signs located on CTH K at East Frontage Road westbound.

B (Vacant)

C Construction

Remove flashing beacon, pole, electrical and concrete footing; backfill the resulting holes, and dispose of all materials outside of the right-of-way according to standard spec 204.3 and 638.3. Concrete footing shall be removed to 2' below the existing ground. The reinforcement shall be cut off flush with the top of the concrete. The footing shall be then covered with topsoil and seeded. This is all incidental to Removing Flashing Beacon and Pole. Solar Beacon, control box and pole are property of the County of Racine. Turn over the existing beacon and pole to Electrical unit, Racine County.

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D Measurement

The department will measure Removing Flashing Beacon and Pole (location), as a unit for each location, 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.0060.010 Removing Flashing Beacon and Pole, EACH

Westbound CTH K (right) at East Frontage Road

SPV.0060.011 Removing Flashing Beacon and Pole, EACH

Westbound CTH K (left) at East Frontage Road

Payment in full compensation for disassembling, removing, including concrete footings, backfilling, and disposal of all materials.

58. Moving Flashing Beacon and Pole Eastbound (right) on CTH K west of West Frontage Road, SPV.0060.012; Eastbound (left) on CTH K west of West Frontage Road, SPV.0060.013.

A Description

Work under this item shall consist of moving flashing beacon and pole and removing old footing. The sign on the structure is paid for under a separate pay item, Moving signs type II. See signing plans for location. This is the pole and beacon for the STOP AHEAD signs located on CTH K eastbound at West Frontage Road

B (Vacant)

C Construction

Move solar flashing beacon, pole, and solar electrical. Remove footing and backfill the resulting holes, and dispose of all materials outside of the right-of-way according to standard spec 204.3 and 638.3. Concrete footing shall be removed to 2' below the existing ground. The reinforcement shall be cut off flush with the top of the concrete. The footing shall be then covered with topsoil and seeded. This is all incidental to Moving flashing beacon and pole. Solar Beacon, control box and pole are property of the County of Racine. Install new type I footing per SDD 9C 2-7, Concrete Bases type 1, 2, 5 and 6. This is incidental to moving the Moving Flashing Beacon and Pole.

D Measurement

The department will measure Moving Flashing Beacon and Pole (location), as a unit for each location, acceptably completed.

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E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.012 Moving Flashing Beacon and Pole, EACH

Eastbound CTH K (right) at West Frontage Road

SPV.0060.013 Moving Flashing Beacon and Pole, EACH

Eastbound CTH K (left) at West Frontage Road

Payment is full compensation for disassembling, moving, including concrete footings, backfilling, and disposal of all materials.

59. Silt Fence Drainage Outlet, Erosion Control Filter Bags, Item SPV.0060.030.

A Description

This special provision describes construction of erosion control filter bags at openings/outlets in silt fence alignments where water may pond against the silt fence, to allow a path for water discharge while still maintaining erosion protection of the downstream/downslope area. Specifically the protection provided by the erosion control filter bags will apply to environmentally sensitive areas such as wetlands and stream tributaries.

B Materials

Bags shall be made of synthetic net with a mesh size of 1/8-inches by 1/8-inches that is of sufficient strength to hold the aggregate and to be lifted vertically.

Fill material shall be clean, sound, hard, durable coarse aggregate meeting the approval of the engineer and conforming to the size and gradation requirements for Size No. 1 coarse aggregate as specified in standard spec 501.2.5.4.4.

C Construction

Provide suitable erosion control filter bags to complete installations at locations shown on the plans or as the engineer directs.

Install erosion control filter bags at the silt fence outlets as directed by the engineer and per plan detail. Place erosion control filter bags immediately after the silt fence has been installed and before starting any construction operation that may cause sedimentation or siltation at the site of the proposed silt fence outlets.

Inspect all erosion control filter bags immediately after each rainfall and at least daily during prolonged rainfall. Immediately correct any deficiencies. In addition, make a daily review of the erosion control filter bags in areas where construction activity has changed the earth contour and drainage runoff to ensure that the bags are functioning properly. Where deficiencies exist, move or adjust existing erosion control filter bags or install additional

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erosion control filter bags as approved or directed by the engineer and at no additional cost to the department.

Remove sediment deposits when the deposits reach approximately one-half of the height of the erosion control filter bag(s), or as directed by the engineer. Dispose of the sediment outside of the right-of-way unless allowed by the engineer. Replace any bags that have been damaged.

Remove erosion control filter bags as part of the silt fence removal operation as specified in standard spec 628.3.4.1 and allowed by the engineer. Dispose of erosion control filter bags and any sediment outside of the right-of-way. Reshape the area where the bags were located, fill sumps and trenches, dispose of erosion control filter bags, sediment and any excess eroded material outside of the right-of-way, and restore the affected area to match the adjacent vegetation.

D Measurement

The department will measure Silt Fence Drainage Outlet, Erosion Control Filter Bags for each installation, acceptably completed. Individual erosion control filter bags will not be measured.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.030 Silt Fence Drainage Outlet, Erosion Control Filter Bags EACH

Payment is full compensation for providing, installing and removing erosion control filter bags used at silt fence drainage outlets at project completion or as the engineer directs; for inspecting and maintaining the erosion control filter bags as specified; for repairing and restoring damaged areas; and for removing and disposing of all surplus and waste material.

60. Removing Lighting Units, Item SPV.0060.101.

A Description

This special provision describes removing of 60-foot wood pole and flood light lighting units and attached conduit and wiring as shown on the plans and according to standard spec 204, remove mast arm or bracket arm, luminaire, air terminal, and junction box, backfill openings or holes to the elevation of the surrounding ground, and landscape all disturbed areas from these removals

B (Vacant)

C Construction

Dispose of all materials except lamps outside of right-of-way. Deliver the lamps to the department under a separate bid item, Lamp Disposal High Intensity Discharge.

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No removal work will be permitted without approval from the engineer. Removal shall start as soon as the temporary lighting or permanent lighting, as applicable, is placed in approved operation. An inspection and approval by the engineer will take place before any associated proposed permanent or temporary lighting is approved for operation.

D Measurement

The department will measure Removing Lighting Units by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.101 Removing Lighting Units EACH

Payment is full compensation for removing wood pole and floodlight lighting units; all excavation and backfill; removal and disposal of material; and for restoring the site. Separate payment will be made for lamp disposal.

61. Lamp Disposal High Intensity Discharge, Item SPV.0060.102.

A Description

This special provision describes the packaging and delivering of high intensity discharge (mercury vapor, metal halide, and high-pressure sodium) lamps removed under this contract to the department for disposal as hazardous materials.

B Materials

Lamps turned in to the department will be considered the property of the department for proper future disposal, and the contractor will have no further obligation for their disposal.

C Construction

Pack intact lamps in the packaging of the new lamps used to replace them, or packaging affording the equivalent protection. Place in full, closed stackable cartons.

Pack broken lamps into (min.) 6 mil thick plastic bags and place inside sturdy cardboard boxes or the equivalent. Mark the outer packaging with the term "broken lamps "with the number of broken lamps clearly marked on the box. Deliver all broken lamps to the department.

The department will not accept lamps improperly packaged or packed in metal containers. The department will reject any lamps not removed as part of a contract pay item or otherwise required under this contract.

Pile cartons no more than four high if palletized and secure cartons with shrink wrap to prevent shifting or falling of the loads. Clearly mark each pallet with the number of lamps on each pallet.

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Deliver the lamps to the department at the South 60th Street office in West Allis. Consolidate all deliveries into a truckload or more, except when all the lamps removed under a contract measure less than a truckload, deliver as one load at one time. Contact (414) 266-1170, to set up an appointment for delivery.

D Measurement

The department will measure Lamp Disposal High Intensity Discharge as each individual unit, acceptably delivered to the department properly packaged. The department will not measure broken lamps that exceed a total of ten percent of all lamps to be delivered.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.102 Lamp Disposal High Intensity Discharge EACH

Payment is full compensation for handling, packaging, labeling and delivering the lamps. Separate payment will be made for removing the lamps from service.

62. Adjusting Water Valves, Item SPV.0060.500.

A Description

This special provision describes the adjustment of existing water service boxes and water gate valve boxes to match the proposed finish grade as shown in the plans and as hereinafter provided.

B (Vacant)

C Construction

C.1 Water Valve Boxes

Adjust water service boxes and water gate valve boxes vertically as required by contractor operations. Set the finish service of valve box in a plumb, vertical position flush with the pavement or terrace. Protect the top standard spec of the box. Provide a new top standard spec if broken.

Correct the condition of the valve if the Caledonia Utility District determines the valve is inoperable even after pavement is installed at the contractor's expense. Make corrections within five days of notification by the Village.

D Measurement

The department will measure Adjusting Water Valves as each individual unit, acceptably completed, regardless of the number of adjustments made to the valve box.

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E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.500 Adjusting Water Valves EACH

Payment is full compensation for providing all required materials; for removing, reinstalling and adjusting the valves. The contractor shall replace valves rendered unusable by the contractor's operations.

63. Remove and Reinstall Mailboxes, Item SPV.0060.502.

A Description

This special provision describes removing and re-installing existing mailboxes and posts at the direction of the engineer.

B (Vacant)

C Construction

Maintain access to the existing mailboxes for postal deliveries and residential pick up where possible.

Where geometric changes to the roadway require that the mailboxes be relocated, document conditions of the existing mailbox, post and newspaper box (if applicable). Carefully remove each affected mailbox and post. Store each mailbox and post in a safe, temporary location during construction.

At the end of the stage, re-install the mailboxes as close as possible to the original location or a location determined by the engineer. Re-install mailboxes in compliance with regulations of the U. S. Postal Service.

The mailboxes shall be constructed per USPS guidelines:

- a. The bottom of the mailbox shall be 45" to 48" from the road surface.
- b. The mailbox shall be placed.
 - i. 6" to 8" from the back of the curb or
 - ii. 24" from the paved road edge where a gravel shoulder exists.
- c. The house address (road and numbers) shall be labeled on the mailbox.
- d. Bury the post 12"-24" deep.

Replace the original post, mailbox, and/or newspaper box (if applicable) with a similar item if any construction-related damage occurs, at no expense to the department.

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D Measurement

The department will measure Remove and Reinstall Mailboxes by each location, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.502Remove and Reinstall MailboxesEACH

Payment is full compensation for removing and temporarily storing the mailbox and for installing the mailbox in the new location.

64. Pavement Cleanup, Item SPV.0075.009.

A Description

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

B Materials

B.1 Pavement Cleanup

Furnish a vacuum-type street sweeper equipped with a power broom, water spray system, and a vacuum collection system.

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

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

C Construction

C.1 Surveillance

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

C.2 Pavement Cleanup

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

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as defined in the DCIP or as directed by the engineer. Include the following roadways for routine sweeping:

- East Frontage Road
- West Frontage Road
- Carol Road
- Michel Court
- And any other roadways approved by the department

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

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

D Measurement

The department will measure Pavement Cleanup by the hour, acceptably completed.

Tickets shall include:

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

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

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV. 0075.009 Pavement Cleanup HR

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

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65. Removing Electrical Wire from Conduit, Item SPV.0090.101.

A Description

This special provision describes removing of electrical wires from existing conduits and disposed of the project site. The existing conduit shall remain in place for reuse.

B (Vacant)

C Construction

No removal work will be permitted without approval from the engineer. Removal shall start as soon as the temporary lighting or permanent lighting, as applicable, is placed in approved operation. An inspection and approval by the engineer will take place before any associated proposed permanent or temporary lighting is approved for operation.

All wires shall be removed from the existing embedded or underground conduits as shown on the plans and as directed by the engineer. Any necessary splices or disconnections shall be done as part of this pay items. Removed wires shall become property of the contractor and shall be disposed of the project site.

D Measurement

The department will measure Removing Electrical Wire from Conduit by linear feet of conduit from where wires shall be removed and disposed of, acceptably completed, as directed by the engineer. The vertical length and wire slack shall be incidental to this pay item

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0090.101 Removing Electrical Wire from Conduit LF

Payment is full compensation for removing electrical wires from conduits; and for disposal of all removed materials.

66. Fiber Optic Tracer Wire, Item SPV.0090.300.

A Description

This special provision describes furnishing and installing fiber optic tracer wire in all conduit containing fiber optic cable.

B Materials

Provide the tracer wire with a black insulation cover, No. 14 AWG, XLP, USE rated, 600 VAC, single conductor, copper wire.

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C Construction

Install the tracer wire in all conduits containing fiber optic cable, running continuously through all pull boxes. Install the tracer wire to each control cabinet, but do not enter the cabinet. The tracer wire may be spliced only in pull boxes. Make splices only between full rolls of wire. For the cable splice, use a Western Union Splice soldered with resin core flux. All exposed surfaces of the solder shall be smooth. Solder splices using a soldering iron. Cover the splice with a WCSMW 30/100 heat shrink tube, minimum length 4-inches, and with a minimum one-inch coverage over the XLP insulation, underwater grade.

D Measurement

The department will measure Fiber Optic Tracer Wire in length by the linear foot of wire, measured along the centerline of the conduit, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0090.300Fiber Optic Tracer WireLF

Payment is full compensation for furnishing and installing the tracer wire; splicing; and for properly disposing of surplus materials.

67. Survey Project 1030-11-71, Item SPV.0105.002.

A Description

This special provision describes modifying standard spec 105.6 and 650 to define the requirements for construction staking for this contract. Conform to standard spec 105.6 and 650 except as modified in this special provision.

Replace standard spec 105.6.1(2) with the following:

The department will not perform any construction staking for this contract. Obtain engineer's approval before performing all survey required to lay out and construct the work under this contract.

Replace standard spec 650.1 with the following:

This section describes the contractor-performed construction staking required under individual contract bid items to establish the horizontal and vertical position for all aspects of construction including:

- 1. storm sewer
- 2. subgrade
- 3. base
- 4. curb and gutter
- 5. pipe culverts
- 6. drainage structures
- 7. pavement

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- 8. pavement markings (temporary and permanent)
- 9. overhead signs
- 10. lighting
- 11. electrical installations
- 12. supplemental control
- 13. slope stakes
- 14. traffic signals
- 15. utilities
- 16. conduit
- 17. traffic control items

B (Vacant)

C Construction

Supplement standard spec 650.3.1 (5) with the following:

Confirm with engineer before using global positioning methods to establish the following:

- 1. Concrete pavement vertical locations.
- 2. Curb, gutter, and curb and gutter vertical locations.
- 3. Storm Sewer layout horizontal or vertical locations, including structure centers, offsets, access openings, rim and invert elevations.

Replace standard spec 650.3.1 (6) with the following:

Maintain neat, orderly, and complete survey notes, drawings, and computations used in establishing the lines and grades. This includes:

- 1. Raw data files
- 2. Digital stakeout reports
- 3. Control check reports
- 4. Supplemental control files (along with method used to establish coordinates and elevation)
- 5. Calibration report

Make the survey notes and computations available to the engineer within 24 hours as the work progresses unless a longer period is approved by the engineer.

Replace standard spec 650.3.3.1 with the following:

Under the Survey Project bid item, global positioning system (GPS) machine guidance for conventional subgrade staking on all or part of the work may be substituted. The engineer may require reverting to conventional subgrade staking methods for all or part of the work at any point during construction if, in the engineer's opinion, the GPS machine guidance is producing unacceptable results.

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Replace standard spec 650.3.3.4.1 with the following:

The department will provide the contractor staking packet as described in the Construction and Materials Manual (CMM) 7.10. At any time after the contract is awarded, the available survey and design information may be requested. The department will provide that information within 5 business days of receiving the contractor's request. The department incurs no additional liability beyond that specified in standard spec 105.6 or standard spec 650 by having provided this additional information.

Supplement standard spec 650.3.3.3.6.2 with the following:

Record all subgrade elevation checks and submit a hard copy to the engineer within 24 hours or as requested by the engineer.

D Measurement

Replace standard spec 650.4 with the following:

The department will measure Survey Project 1030-11-71 as a separate single lump sum unit of work, acceptably completed.

E Payment

Replace standard spec 650.5 with the following:

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

ITEM NUMBER DESCRIPTION UNIT SPV.0105.002 Survey Project 1030-11-71 LS

Payment is full compensation for performing all survey work required to lay out and construct all work under this contract. The department will not make final payment for this item until the contractor submits all survey notes and computations used to establish the required lines and grades to the engineer within 24 hours of completing this work. Re-staking due to construction disturbance and knock-outs will be performed at no additional cost to the department.

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68. Concrete Pavement Joint Layout, Item SPV.0105.003.

A Description

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

B (Vacant)

C Construction

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

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

D Measurement

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

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0105.003Concrete Pavement Joint LayoutLS

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

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

69. Maintenance of Lighting Systems, Item SPV.0105.101.

A Description

This special provision describes maintaining existing and proposed lighting system beginning on the date that the contractor's activities, including electrical, begin at the job site. Properly operate and maintain all existing and proposed lighting systems which are part of, or which may be affected by, the work until final acceptance or as otherwise determined by the engineer.

Before performing any excavation, removal, or installation work, including electrical, for the project, initiate a request for maintenance transfer and preconstruction inspection, as specified in this special provision. Conduct the transfer and inspection in the engineer's presence and a representative of the party or parties responsible for maintenance of any lighting systems which may be affected by the work. Request the maintenance preconstruction inspection at least seven calendar days before the desired inspection date.

Existing lighting systems, when shown on the plans, are intended only to indicate the general equipment installation of the systems involved, possibly not exactly representing the field conditions. A site visit will confirm the exact condition of the electrical equipment and systems to be maintained.

Issues found during contractor assessment can be discussed and addressed by contacting the SE Region Lighting Engineer (Eric Perea) before transferring maintenance responsibility to the contractor.

Maintenance of the lighting system includes lighting control cabinet(s): HL-51-RJ.

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The following lighting control cabinet(s) will be used long enough to allow the installation of temporary lighting: HL-51-RJ.

B (Vacant)

C Construction

C.1 Existing Lighting Systems

Existing lighting systems are defined as any lighting system or part of a lighting system in service before this contract. The contract drawings indicate the general extent of any existing lighting. Understand the effort required for compliance with these specifications; Clear and replace any knockdowns or damage caused to the existing lighting system, regardless of who causes the damage. Maintain existing lighting system as follows:

Partial Maintenance: Only maintain the affected circuits if the number of circuits affected by the contract is equal to or less than 40% of the total number of circuits in a given controller and the controller is not part of the contract work unless otherwise indicated. Obtain engineer approval to isolate the affected circuits by in-line waterproof fuse holders as specified elsewhere

Full Maintenance: Maintain the entire controller and all associated circuits if the number of circuits affected by the contract is greater than 40% of the total number of circuits in a given controller, or if the controller is modified in any way under the contract work.

C.2 Proposed Lighting Systems

Proposed lighting systems are any temporary or final lighting systems or part of a lighting system to be constructed under this contract.

Maintain all items installed under this contract, including all equipment failures or malfunctions as well as equipment damage by the motoring public, contractor operations, or other sources.

C.3 Maintenance Operations

Maintain lighting units (including sign lighting), cable runs, and lighting controls. If a pole is knocked down or sign light damage is caused by normal vehicular traffic, promptly clear the lighting unit and circuit discontinuity, and restore the system to service. Reinstall the lighting unit (if salvageable), or install a new one.

Provide weekly night-time patrol of the lighting system, with patrol reports filed on standard forms as designated by the engineer. Send a copy to the region lighting coordinator.

Correct the deficiencies within a time frame acceptable to the engineer. Remaining deficiencies may require corrective action on specific lighting system equipment as described in the chart or based on material availability.

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| Incident or Problem | Service Response | Service | Permanent | |
|-----------------------------|------------------|------------------|------------------|--|
| | Time | Restoration Time | Repair Time | |
| Control cabinet out | 12 hours | 24 hours | 7 Calendar days | |
| Hanging mast arm | 1 hour to clear | NA | 7 Calendar days | |
| Motorist caused damage | | | | |
| or leaning light pole 10 | 1 hour to clear | 4 hours | 7 Calendar days | |
| degrees or more | | | | |
| Circuit out – Needs to | 12 hours | 12 hours | NA | |
| reset breaker | 12 Hours | 12 110013 | IVA | |
| Circuit out – Cable trouble | 12 hours | 24 hours | 21 Calendar days | |
| Outage of 3 or more | 12 hours | 24 hours | NA | |
| successive lights | 12 110015 | 24 Hours | | |
| Outage of 75% of lights | 12 hours | 24 hours | NA | |
| on one tower | 12 Hours | 24 Hours | IVA | |
| Outage of light nearest RR | | | | |
| crossing approach, Islands | 12 hours | 24 hours | NA | |
| and gores | | | | |
| Outage (single or multiple | | | | |
| non successive lights) | NI A | NA | 7 Calendar days | |
| found on night outage | NA | | | |
| survey | | | | |

C.4 Lighting

- 1. **Serve Response Time:** The amount of time from the initial contractor notification to the patrolman physically arriving.
- 2. **Service Restoration Time**: The amount of time from the initial contractor notification to a fully operational system again. (In cases of motorist-caused damage, the undamaged portions of the system are operational.)
- 3. **Permanent Repair Time**: The amount of time from initial contractor notification until permanent repairs are made unless the contractor was required to make temporary repairs to meet the service restoration requirement. Temporary repairs that do not meet the service restoration requirements require engineer's approval.

C.5 Operation of Lighting

Maintain operational lighting every night, from dusk until dawn. Do not operate duplicate lighting systems (such as temporary lighting and proposed new lighting) simultaneously. Do not keep lighting systems in operation during long daytime periods. Ensure that the lighting system is fully operational and approved by the engineer before submitting a pay request.

D Measurement

The department will measure Maintenance of Lighting Systems as a single lump sum unit of work, acceptably completed.

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E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0105.101Maintenance of Lighting SystemsLS

Payment is full compensation for Maintenance of Lighting Systems, both existing and proposed, weekly night-time patrol of the lighting system, mobilization, and filed patrol reports.

The contractor will be reimbursed for replaced equipment, materials only, if the invoice paid for the individual piece of equipment is greater than \$500.

Non-compliance with designated response, restoration, and permanent repair times will result in liquidated damages of \$500 per day per occurrence. In addition, the department reserves the right to assign any work not completed within this timeframe to the State Electrical Engineering and Electronics Unit. Reimburse all costs associated to repair this uncompleted work within one month after the incident or additional liquidated damages of \$500 per month per occurrence will be assessed. Unpaid bills will be deducted from the cost of the contract. Repeated non-response or a negligent maintenance shall result in the State's Electrical Engineering and Electronics Unit being directed to correct all deficiencies and the resulting costs deducted from all monies owed the contractor.

Not understanding the effort required for compliance with these specifications will not be justification for extra payment or reduced responsibilities. No payment will be considered for damage or repairs due to contractor operations.

Not ensuring that the lighting system is fully operational and approved by the engineer before submitting a pay request will be grounds for denying the pay request.

70. Freeway Lighting Integrator Id 1030-11-71, Item SPV.0105.102.

A Description

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

B Personnel Qualifications

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

C Construction

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

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The freeway lighting integrator shall:

- Familiarize their selves with the location and nature of existing lighting circuits. This familiarity shall include the extent of any lighting system that overlaps project limits.
- Maintain a file of applicable permits or licenses issued to the contractor, and convey copies to the engineer.
- Keep with them at all times a contact list of affected lighting personnel.
- Maintain a record of tagouts and the clearance of tagouts.
- Interface with department electrical personnel to determine how contract limits might affect maintenance or operation of existing systems.
- Maintain ongoing contact with the department's Diggers' Hotline coordinator to
 ensure that each of the two persons knows that all requested utility locates are
 marked in the field by the appropriate party. The intent here is to assure coordination.
 This special provision does not transfer additional utility locating responsibilities to
 the contractor, beyond those responsibilities already assigned to them by other
 provisions of the contract.
- Inform the department of any lighting outages, including outside the project limits, where a lighting system crosses the project boundary.
- Maintain real-time records of existing, removed and new lighting facilities. Include utility service extensions. Additional required records will include temporary connections and their ultimate removal. Contact SE Region Lighting Engineer for record formatting.
- Maintain records of tests, including: "meg" tests, amperage draw per circuit leg, voltage reading at disconnect, and voltage reading at the furthest pole per circuit leg. Convey these records at time of acceptance or partial acceptance.
- At the time of acceptance or partial acceptance, convey as-built drawings in both the following formats: plan redlines and .dgn and/or .PDF electronic as directed by the engineer. Include utility service extensions.
- Secure copies of operator's manuals, tear sheets, and other literature as may be provided by manufacturers of some lighting materials, and convey a minimum of three sets to the department.
- Work with the engineer to notify department electrical personnel of acceptance or partial acceptance.
- Perform related duties as may be needed to ensure continuity of freeway lighting during construction, and orderly transfer upon completion.
- Contractor must use GPS to provide longitude and latitudes coordinates of each light pole, pull box and control cabinet. The data must be entered into a Microsoft Excel 2007 (or newer version) spreadsheet along with other required fields as specified by WisDOT.

Complete WisDOT provided excel lighting distribution center record and return to SE Region Lighting Engineer once completed. Please contact SE Region Lighting Engineer for excel lighting distribution center record template.

D Measurement

The department will measure Freeway Lighting Integrator (project) as a single complete lump sum unit of work, acceptably completed.

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E Payment

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

following bid item

ITEM NUMBERDESCRIPTIONUNITSPV.0105.102Freeway Lighting Integrator Id 1030-11-71LS

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

71. Lighting System Survey, Item SPV.0105.103.

A Description

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

B (Vacant)

C Construction

Locate and survey using GPS all the lighting units, Pull boxes and control cabinets. Maintain neat, orderly, and complete survey notes. Enter the Latitude and Longitude Coordinates into a Microsoft Excel 2007 (or newer version) spreadsheet along with other required fields as specified by WisDOT and convey these records at time of acceptance or partial acceptance to the regional lighting engineer.

D Measurement

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

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0105.103Lighting System SurveyLS

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

72. Temporary Mailboxes, Item SPV.0105.104.

A Description

This special provision describes furnishing and installing temporary mailboxes at Fuhrman Drive (Stage One) and Michels Court (Stage Two) or as directed by the engineer.

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B Materials

Furnish U.S. Postal Service-approved mailboxes mounted on temporary supports that are at the correct dimensions for vehicle delivery. The mailbox cluster must be movable.

Where the mailbox location is accompanied by a newspaper receptacle, provide a similar temporary receptacle at the corresponding location.

C Construction

Prior to each stage of construction, the engineer will determine which mailboxes will be temporarily relocated due to construction activities. Prepare a temporary support in a single location (per stage) as directed by the engineer for mounting of the temporary mailboxes.

The temporary support shall be constructed to resist wind loads and remain accessible throughout the duration of the project.

The mailboxes shall be constructed per USPS guidelines:

- a. The bottom of the mailbox shall be 45" to 48" from the road surface.
- b. The mailbox shall be placed
 - i. 6" to 8" from the back of the curb or
 - ii. 24" from the paved road edge where a gravel shoulder exists.
- c. The house address (road and numbers) shall be labeled on the mailbox.

D Measurement

The department will measure Temporary Mailboxes as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0105.104Temporary MailboxesLS

Payment is full compensation for furnishing, and installing the Temporary Mailboxes at each staged location; for furnishing and installing all devices and materials necessary to erect the Temporary Mail Boxes; and for removal and disposal of the Temporary Mailboxes.

73. Install State Furnished Traffic Signal Cabinet CTH K & East Frontage Rd, Item SPV.0105.300.

A Description

This special provision describes the transporting and installing of department furnished materials for traffic signals.

B Materials

Use materials furnished by the department including: the traffic signal controller and the traffic signal cabinet.

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Pick up the department furnished materials at the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical Field Unit at (414) 266-1170 and make arrangements for picking up the department furnished materials five working days prior to picking the materials up.

Provide all other needed materials in conformance with standard spec 651.2, 652.2, 653.2, 654.2, 655.2, 656.2, 657.2, 658.2 and 659.2.

C Construction

Perform work according to standard spec 651.3, 652.3, 653.3, 654.3, 655.3, 656.3, 657.3, 658.3 and 659.3 except as specified below.

Request a signal inspection of the completed signal installation to the engineer at least five working days prior to the time of the requested inspection. The department's Region Electrical personnel will perform the inspection.

D Measurement

The department will measure Install Traffic Signal Cabinet CTH K & East Frontage Rd as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0105.300 Install State Furnished Traffic Signal Cabinet LS CTH K & East Frontage Rd

Payment is full compensation for transporting and installing the traffic signal controller and the traffic signal cabinet; for furnishing and installing all other items necessary (such as, wire nuts, splice kits and/or connectors, tape, insulating varnish, ground lug fasteners, etc.) to make the proposed system complete from the source of supply to the most remote unit and for clean-up and waste disposal.

74. Transport Traffic Signal and Intersection Lighting Materials CTH K & East Frontage Rd, Item SPV.0105.301.

A Description

This special provision describes the transporting of department furnished materials for traffic signals and intersection lighting.

B Materials

Transport materials furnished by the department including: Anchor rods, monotube arms/poles and luminaire arms (to be installed on monotube assemblies).

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Pick up the department furnished materials at the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical Field Unit at (414) 266-1170 and make arrangements for picking up the department furnished materials five working days prior to picking the materials up.

Provide all other needed materials in conformance with standard spec 651.2, 652.2, 653.2, 654.2, 655.2, 656.2, 657.2, 658.2 and 659.2.

C Construction

Perform work according to standard spec 651.3, 652.3, 653.3, 654.3, 655.3, 656.3, 657.3, 658.3 and 659.3 except as specified below.

D Measurement

The department will measure Transport Traffic Signal and Intersection Lighting Materials CTH K & East Frontage Rd as a single lump sum unit of work, acceptably completed.

E Payment

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

| ITEM NUMBER | DESCRIPTION | UNIT |
|--------------|--|------|
| SPV.0105.301 | Transport Traffic Signal and Intersection Lighting | LS |
| | Motorials CTUV & Fast Fronting Dd | |

Materials CTH K & East Frontage Rd

Payment is full compensation for transporting the anchor rods, monotube poles/arms and luminaire arms (to be installed on monotubes). Installation of these materials is included under a separate pay item.

75. Install Fiber Optic Communications in Cabinet CTH K & East Frontage Rd (CB S51-1438), Item SPV.0105.302.

A Description

This special provision describes installing fiber optic communications equipment in traffic signal cabinets.

B Materials

The department will furnish pre-terminated fiber optic patch panels and managed Ethernet switches. The materials will be provided with the traffic signal cabinet. The patch panels will have pre-terminated fiber optic cable pigtails. Provide two each 1-meter lengths of ST-ST single mode fiber jumper (2 fibers per jumper) from the patch panel to the Ethernet switch. Provide a 1-meter length of CAT-5e cable from the Ethernet switch to the controller. Provide a 1-meter length of CAT-5e cable from the Ethernet switch to the Conflict Monitor. CAT-5e patch cords shall have factory pre-terminated RJ45 / 8P8C connectors on both ends per TIA/EIA T568B. Provide all patch panel, Ethernet switch, and Interface Panel attachment hardware.

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Provide a 14 AWG XLP insulated, stranded, copper, 600 volt AC locate wire through the conduit run from the communication vault to the traffic signal cabinet. Connect the locate wire by using a silicone filled wire nut at each pull box, vault or other access point. Alternatively, use a single wire through the access points, leaving a 6 foot coil in each pull box, vault or other access point for splicing. All material under this item shall meet the requirements of standard spec 655.

C Construction

Install the patch panel and Ethernet switch on the side of the traffic signal cabinet opposite the electrical service at a location as approved by the engineer. With approval by the engineer, the Ethernet switch may be placed on a shelf near the patch panel. Install the preterminated fiber optic cable in conduit from the patch panel to the communication vault as specified in standard spec 678.3.1. Fiber optic cable ends shall be covered securely to protect open ends during installation in raceways. Leave the remainder of the fiber optic cable coiled in the communication vault.

Install the fiber jumpers and CAT-5e cable and provide a communications link from the communication vault to the controller. Install the CAT5-e cable from the Interface Panel to the Ethernet switch.

Connect the locate wire by using a wire nut at each access point. Alternatively, use a single wire through the access points.

D Measurement

The department will measure Install Fiber Optic Communications in Cabinet (location) as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

SPV.0105.302

Install Fiber Optic Communications in Cabinet

CTH K & East Frontage Rd (CB S51-1438)

Payment is full compensation for installing pre-terminated patch panels, Ethernet switches, and fiber optic cable in conduit; furnishing and installing attachment hardware, fiber jumpers, CAT-5e cable, and locate wire.

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November 2013 ASP-4

ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

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

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

Payment to Lower-Tier Subcontractors

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

Release of Routine Retainage

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

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

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

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

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

Make the following revisions to the standard specifications:

109.1.1.2 Bid Items Designated as Pay Plan Quantity

Replace the entire text with the following effective with the June 2017 letting:

109.1.1.2.1 General

- (1) If the schedule of items designates a bid item with a **P** in the item description, the department will use the plan quantity, the approximate quantity the schedule of items shows, for payment unless one or both of the following occurs:
 - Scope changes regardless of the magnitude of the revised work.
 - Errors and omissions that affect the plan quantity.

109.1.1.2.2 Scope Changes

(1) For engineer-directed quantity increases, the engineer will issue a contract change order for extra work, establish the cost of the added work as specified in 109.4, and measure the revised work. For engineer-directed quantity decreases, the engineer will issue a contract change order to adjust the plan quantity under the designated bid item.

109.1.1.2.3 Errors and Omissions

(1) The engineer may issue a change order under 105.4(5) to adjust the plan quantity for an error or omission and may revise the contract unit price as specified in 109.4.

305.2.1 General

Replace paragraph two with the following effective with the June 2017 letting:

(2) Where the contract specifies or allows 1 1/4-inch base, do not place reclaimed asphalt, reprocessed material, or blended materials below virgin aggregate materials unless the contract specifies or the engineer allows in writing.

310.2 Materials

Replace paragraph three with the following effective with the June 2017 letting:

(3) Do not place reclaimed asphalt, reprocessed material, or blended materials below open-graded base unless the contract specifies or the engineer allows in writing.

320.3.1.1 Consolidating, Finishing, and Curing

Replace paragraph two with the following effective with the June 2017 letting:

(2) Cure concrete base as specified for concrete pavement in 415.3.12. Use wax-based curing compound conforming to 501.2.9.

390.3.2 Concrete Patching

Replace paragraph two with the following effective with the June 2017 letting:

(2) Cure exposed patches as specified for concrete pavement in 415.3.12. Use wax-based curing compound conforming to 501.2.9. Protect as specified for concrete pavement in 415.3.14. Open to traffic as specified for concrete base in 320.3.

390.3.4 Special High Early Strength Concrete Patching

Replace the entire text with the following effective with the June 2017 letting:

- (1) Construct as specified for special high early strength repairs under 416.3.8 except as follows:
 - The contractor may delay removal for up to 14 calendar days after cutting the existing pavement.
 - Open to traffic as specified for concrete base in 320.3.
- (2) Cure exposed patches as specified for concrete pavement in 415.3.12. Use wax-based curing compound conforming to 501.2.9. Do not apply excess curing compound that could cause slippery pavement under traffic.

440.3.5.2 Corrective Actions for Localized Roughness

Replace paragraph two with the following effective with the September 2016 letting:

(2) The engineer will not direct corrective action or assess a pay reduction for an area of localized roughness without physically riding that work. The engineer will not direct corrective action on bridges without authorization from the department's bureau of structures.

450.3.1.1.4 Recording Truck Loads

Replace the entire text with the following effective with the December 2016 letting:

- (1) If not using automatic batch recording, install a digital recorder as part of the platform truck or storage silo scales. Ensure that the recorder can produce a printed digital record of at least the gross or net weights of delivery trucks. Provide gross, tare, net weights, load count, and the cumulative tonnage; the date, time, ticket number, WisDOT project ID, and mix 250 number; and the mix type including the traffic, binder, and mix designation codes specified in 460.3.1. Ensure that scales cannot be manually manipulated during the printing process. Provide an interlock to prevent printing until the scales come to rest. Size the scales and recorder to accurately weigh the heaviest loaded trucks or tractor-trailers hauling asphaltic mixture. Ensure that recorded weights are accurate to within 0.1 percent of the nominal capacity of the scale.
- (2) Ensure that tickets identify additives not included in the mix design submittal. Indicate on the ticket if the mixture will be placed under a cold weather paving plan and identify the warm mix additive and dosage rate required under 450.3.2.1.2.2.

455.3.2.1 General

Replace paragraph one with the following effective with the December 2016 letting:

(1) Apply tack coat only when the air temperature is 32 F or more unless the engineer approves otherwise in writing. Before applying tack coat ensure that the surface is reasonably free of loose dirt, dust, or other foreign matter. Do not apply to surfaces with standing water. Do not apply if weather or surface conditions are unfavorable or before impending rains.

460.2.1 General

Replace the entire text with the following effective with the December 2016 letting:

- (1) Furnish a homogeneous mixture of coarse aggregate, fine aggregate, mineral filler if required, SMA stabilizer if required, recycled material if used, warm mix asphalt additive or process if used, and asphaltic material. Design mixtures conforming to table 460-1 and table 460-2 to 4.0% air voids to establish the aggregate structure.
- (2) Determine the target JMF asphalt binder content for production from the mix design data corresponding to 3.0% air voids (97% Gmm) target at the design the number of gyrations (Ndes). Add liquid asphalt to achieve the required air voids at Ndes.
- (3) For SMA, determine the target JMF asphalt binder content for production from the mix design data corresponding to 4.0% air voids (96% Gmm) target at Ndes.

460.2.8.2.1.5 Control Limits

Replace paragraph one with the following effective with the December 2016 letting:

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

| ITEM | JMF LIMITS | WARNING LIMITS |
|-------------------------------------|------------|----------------|
| Percent passing given sieve: | | |
| 37.5-mm | +/- 6.0 | +/- 4.5 |
| 25.0-mm | +/- 6.0 | +/- 4.5 |
| 19.0-mm | +/- 5.5 | +/- 4.0 |
| 12.5-mm | +/- 5.5 | +/- 4.0 |
| 9.5-mm | +/- 5.5 | +/- 4.0 |
| 2.36-mm | +/- 5.0 | +/- 4.0 |
| 75-µm | +/- 2.0 | +/- 1.5 |
| Asphaltic content in percent | - 0.3 | - 0.2 |
| Air voids in percent ^[1] | +1.3/-1.0 | +1.0/-0.7 |
| VMA in percent ^[2] | - 0.5 | - 0.2 |

^[1] For SMA, JMF limits are +/-1.3 and warning limits are +/-1.0.

460.2.8.2.1.6 Job Mix Formula Adjustment

Replace paragraph one with the following effective with the December 2016 letting:

(1) The contractor may request adjustment of the JMF according to CMM 8-36.6.13.1. Have an HMA technician certified at a level appropriate for process control and troubleshooting or mix design submit a written JMF adjustment request. Ensure that the resulting JMF is within specified master gradation bands. The department will have a certified Hot Mix Asphalt, Mix Design, Report Submittals technician review the proposed adjustment and, if acceptable, issue a revised JMF.

460.2.8.3.1.6 Acceptable Verification Parameters

Replace paragraph one with the following effective with the December 2016 letting:

- (1) The engineer will provide test results to the contractor within 2 mixture-production days after obtaining the sample. The quality of the product is acceptably verified if it meets the following limits:
 - Va is within a range of 2.0 to 4.3 percent. For SMA, Va is within a range of 2.7 to 5.3 percent.
 - VMA is within minus 0.5 of the minimum requirement for the mix design nominal maximum aggregate size.

^[2] VMA limits based on minimum requirement for mix design nominal maximum aggregate size in table 460-1.

460.3.3.1 Minimum Required Density

Replace paragraph one with the following effective with the December 2016 letting:

(1) Compact all layers of HMA mixture to the density table 460-3 shows for the applicable mixture, location, and layer.

TABLE 460-3 MINIMUM REQUIRED DENSITY[1]

| | | PERCENT | OF TARGET MAXIMUM DE | ENSITY |
|---------------------------------------|-------|---------------------|----------------------|--------------------|
| LOCATION | LAYER | | MIXTURE TYPE | |
| | | LT and MT | HT | SMA ^[5] |
| TRAFFIC LANES[2] | LOWER | 93.0 ^[3] | 93.0 ^[4] | |
| TRAFFIC LAINES | UPPER | 93.0 | 93.0 | |
| SIDE ROADS, | LOWER | 93.0 ^{3]} | 93.0 ^[4] | |
| CROSSOVERS, TURN LANES, & RAMPS | UPPER | 93.0 | 93.0 | |
| SHOULDERS & | LOWER | 91.0 | 91.0 | |
| APPURTENANCES | UPPER | 92.0 | 92.0 | |

^[1] The table values are for average lot density. If any individual density test result falls more than 3.0 percent below the minimum required target maximum density, the engineer may investigate the acceptability of that material.

460.5.2.1 General

Replace paragraph six with the following effective with the December 2016 letting:

(6) If during a QV dispute resolution investigation the department discovers mixture with 1.5 > Va > 5.0 or VMA more than 1.0 below the minimum allowed in table 460-1, and the engineer allows that mixture to remain in place, the department will pay for the quantity of affected material at 50 percent of the contract price.

460.5.2.3 Incentive for HMA Pavement Density

Replace paragraph one with the following effective with the December 2016 letting:

(1) If the lot density is greater than the minimum specified in table 460-3 and all individual air voids test results for that mixture placed during the same day are within 2.5 - 4.0 percent, the department will adjust pay for that lot as follows:

INCENTIVE PAY ADJUSTMENT FOR HMA PAVEMENT DENSITY[1]

PERCENT LOT DENSITY ABOVE SPECIFIED MINIMUM
From -0.4 to 1.0 inclusive
From 1.1 to 1.8 inclusive
More than 1.8

\$0.40
\$0.80

^[2] Includes parking lanes as determined by the engineer.

^[3] Minimum reduced by 2.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

^[4] Minimum reduced by 1.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

^[5] The minimum required densities for SMA mixtures are determined according to CMM 8-15.

^[1] SMA pavements are not eligible for density incentive.

^[2] The department will prorate the pay adjustment for a partial lot.

501.2.6 Fly Ash

Replace the entire subsection with the following effective with the December 2016 letting:

501.2.6.1 General

- (1) Fly ash is defined as a finely divided residue resulting from the combustion of coal in a base loaded electric generating plant, transported from the boiler by flue gases, and later collected, generally by precipitators. Use fly ash in concrete manufactured by facilities and processes known to provide satisfactory material.
- (2) Test fly ash using a recognized laboratory, as defined in 501.2.2(1), starting at least 30 days before its proposed use, and continuing at ASTM-required frequencies as the work progresses. The manufacturer shall test the chemical and physical properties listed in tables 1 and 2 of ASTM C618 at the frequencies and by the test methods prescribed in ASTM C311.
- (3) Use only one source of fly ash for a bid item of work under the contract, unless the engineer directs or allows otherwise in writing.
- (4) Prequalify any proposed fly ash source as follows: The contractor shall obtain a copy of the certified report of tests or analysis made by a qualified independent laboratory, recognized by the department under 501.2.2, showing full and complete compliance with the above specification from the fly ash manufacturer and furnish it to the engineer. Provide this report to the engineer at least 14 calendar days before using the fly ash.
- (5) The manufacturer shall retain test records for at least 5 years after completing the work, and provide these records upon request.

501.2.6.2 Class C Ash

(1) Conform to ASTM C618 class C except limit the loss on ignition to a maximum of 2 percent.

501.2.6.3 Class F Ash

(2) Furnish a class F fly ash from a source listed on the department's approved product list, and conform to ASTM C618 class F except limit the loss on ignition to a maximum of 2 percent.

502.3.7.8 Floors

Replace paragraph sixteen with the following effective with the September 2016 letting:

(16) The finished bridge floor shall conform to the surface test specified in 415.3.10. The engineer will not direct corrective grinding without authorization from the department's bureau of structures.

503.3.2.1.1 Tolerances

Increase the "length of beam" max tolerance for prestressed concrete I-type girders from 3/4" to 1 1/2" effective with the December 2016 letting:

PRESTRESSED CONCRETE I-TYPE GIRDERS

Errata

Make the following corrections to the standard specifications:

104.2.2.5 Change Orders for Eliminated Work

Correct errata by changing "eliminated bid items" to "eliminated work."

104.2.2.5 Change Orders for Eliminated Work

(1) The department has the right to partially eliminate or completely eliminate work the project engineer finds to be unnecessary for the project. If the project engineer partially eliminates or completely eliminates work, the project engineer will issue a contract change order for a fair and equitable amount as specified in 109.5.

105.4 Coordination of the Contract Documents

Correct errata to change "apparent error or omission" to just "error or omission."

(5) Neither the contractor nor the department may take advantage of an error or omission in the contract. Notify the engineer immediately as specified in 104.3 upon discovering an error or omission. The engineer will offer an interpretation and make the necessary corrections.

105.13.4 Content of Claim

Correct errata to change references to the "Blue Book" rates to reference "EquipmentWatch" rates.

- (1) Include the following 5 items in the claim.
 - 1. A concise description of the claim.
 - 2. A clear contractual basis for the claim. This should include reference to 104.2 on revisions to the contract and as appropriate, specific reference to contract language regarding the bid items in question.
 - 3. Other facts the contractor relies on to support the claim.
 - 4. A concise statement of the circumstances surrounding the claim and reasons why the department should pay the claim. Explain how the claimed work is a change to the contract work.
 - 5. A complete breakdown of the costs used to compile the claim. Include copies of all EquipmentWatch equipment rental rate sheets used, with the applicable number highlighted.

108.13 Terminating the Contract for Convenience of the Department

Correct errata by changing "eliminated bid items" to "eliminated work."

(4) If the department orders termination of the contract for convenience, the department will pay for all completed work as of that date at the contract price. The department will pay for partially completed work at agreed prices or by force account methods specified in 109.4.5 provided, however, that payment does not exceed the contract price for the bid item under which the work was performed. The department will pay for work eliminated by the termination only to the extent provided under 109.5. The department will pay for new work, if any, at agreed prices or paid for by force account methods specified in 109.4.5.

109.2 Scope of Payment

Correct errata to clarify that work under the contract is included in payment unless specifically excluded.

- (2) The department will pay for the quantity of work acceptably completed and measured for payment as the measurement subsection for each bid item specifies. Within the contract provide means to furnish and install the work complete and in-place. Payment is full compensation for everything required to perform the work under the contract including, but not limited to, the work elements listed in the payment subsection. Payment also includes all of the following not specifically excluded in that payment subsection:
 - 1. Furnishing and installing all materials as well as furnishing the labor, tools, supplies, equipment, and incidentals necessary to perform the work.
 - 2. All losses or damages, except as specified in 107.14, arising from one or more of the following:
 - The nature of the work.
 - The action of the elements.
 - Unforeseen difficulties encountered during prosecution of the work.
 - 3. All insurance costs, expenses, and risks connected with the prosecution of the work.
 - 4. All expenses incurred because of an engineer-ordered suspension, except as specified in 104.2.2.3.
 - 5. All infringements of patents, trademarks, or copyrights.
 - 6. All other expenses incurred to complete and protect the work under the contract.

109.4.5.5.1 General

Correct errata to change references to the "Blue Book" rates to reference "EquipmentWatch" rates.

(2) The department will pay for use of contractor-owned equipment the engineer approves for force account work at published rates. The department will pay the contractor expense rates, as modified in 109.4.5.5, given in EquipmentWatch Cost Recovery (formerly Rental Rate Blue Book). Base all rates on revisions effective on January 1 for all equipment used in that calendar year.

http://equipmentwatch.com/estimator/

109.4.5.5.2 Hourly Equipment Expense Rates (Without Operators)

Correct errata to change references to the "Blue Book" rates to reference "EquipmentWatch" rates.

(1) The contractor shall determine, and the department will confirm, hourly equipment expense rates as follows:

$HEER = [RAF \times ARA \times (R/176)] + HOC$

Where:

HEER = Hourly equipment expense rate.

RAF = EquipmentWatch regional adjustment factor.

ARA = EquipmentWatch age rate adjustment factor.

R = Current EquipmentWatch monthly rate.

HOC = EquipmentWatch estimated hourly operating cost.

(2) The EquipmentWatch hourly operating cost represents all costs of equipment operation, including fuel and oil, lubrication, field repairs, tires, expendable parts, and supplies.

109.4.5.5.3 Hourly Equipment Stand-By Rate

Correct errata to change references to the "Blue Book" rates to reference "EquipmentWatch" rates.

(1) For equipment that is in operational condition and is standing-by with the engineer's approval, the contractor shall determine, and the department will confirm, the hourly stand-by rate as follows:

$HSBR = RAF \times ARA \times (R/176) \times (1/2)$

Where:

HSBR = Hourly stand-by rate.

RAF = EquipmentWatch regional adjustment factor.

ARA = EquipmentWatch age rate adjustment factor.

R = Current EquipmentWatch monthly rate.

(2) The department will limit payment for stand-by to 10 hours or less per day up to 40 hours per week. The department will not pay the contractor for equipment that is inoperable due to breakdown. The department will not pay for idle equipment if the contractor suspends work or if the contractor is maintaining or repairing the equipment.

109.4.5.5.4 Hourly Outside-Rented Equipment Rate

Correct errata to change references to the "Blue Book" rates to reference "EquipmentWatch" rates.

(1) If the contractor rents or leases equipment from a third party for force account work, the contractor shall determine, and the department will confirm, the hourly outside-rented equipment rate as follows:

HORER = HRI + HOC

Where:

HORER = Hourly outside-rented equipment rate

HRI = Hourly rental invoice costs prorated for the actual number of hours

that rented equipment is operated solely on force account work

HOC = EquipmentWatch hourly operating cost.

109.5 Eliminated Work

Correct errata by changing "eliminated bid items" to "eliminated work."

109.5 Eliminated Work

- (1) If the department partially eliminates or completely eliminates work as specified in 104.2.2.5, the department will pay contractor costs incurred due to that elimination. The department will pay a fair and equitable amount covering all costs incurred as of the date the work was deleted. Immediately submit a certified statement covering all money expended for the eliminated work.
- (2) The department will execute a contract change order for the following costs related to eliminated work:
 - 1. Preparation expenses defined as follows:
 - If preparation for the eliminated work has no value to other contract work, the department will reimburse the contractor in full for that preparation.
 - If preparation for the eliminated work is distributed over other contract work, the department will
 prorate reimbursement based on the value of the eliminated work compared to the total value of
 associated contract work.
 - 2. All restocking and cancellation charges.
 - 3. A markup for applicable overhead and other indirect costs paid as 7 percent of the contract price of the work actually eliminated.
- (3) If the department partially eliminates or completely eliminates work, the department may pay for, and take ownership of, materials or supplies the contractor has already purchased.

201.3 Construction

Correct errata by changing the link from 201.3(14) to 201.3(15).

(16) Dispose of clearing and grubbing debris before proceeding with grading operations. If the contractor intends to burn debris but cannot secure burning permits on schedule, do not delay removing clearing debris from areas affected by other operations. While waiting to secure burning permits, pile clearing and grubbing debris beyond the limits affected by other work. Do not leave elm debris beyond the limits specified in 201.3(15).

204.3.2.2.1 General

Correct errata by removing the reference to 490 which was deleted effective with the 2017 spec.

(1) Under the Removing Pavement bid item, remove concrete pavements, concrete alleys, concrete driveways, or rigid base including all surfaces or other pavements superimposed on them.

440.1 Description

Correct errata to replace "150 feet of the points of curvature" with " entry and exit curves".

(2) Profile the final mainline riding surfaces greater than 1500 feet in continuous length. Include bridges, bridge approaches, and railroad crossings in the calculation of IRI. Exclude roundabouts and pavements within their entry and exit curves from the calculation of IRI.

460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater

Correct 460.2.8.2.1.3.1 (6) to change the reference from ASTM D4867 to AASHTO T283.

(6) Also conduct field tensile strength ratio tests according to AASHTO T283 on mixtures requiring an antistripping additive. Test each full 50,000 ton production increment, or fraction of an increment, after the first 5000 tons of production. Perform required increment testing in the first week of production of that increment. If field tensile strength ratio values are either below the spec limit or less than the mixture design JMF percentage value by 20 or more, notify the engineer. The engineer and contractor will jointly determine a corrective action.

506.2.8.3 Expansion Bearing Assemblies

Correct errata to update ASTMs and change the specified melting point from 622 +/- 3 to 621 +/- 18 F.

(6) Use PTFE materials that are virgin polytetrafluoroethylene fluorocarbon resin, unfilled conforming to ASTM D4894. The finished materials shall exhibit the following physical properties:

| REQUIREMENT | TEST METHOD | UNFILLED VALUE |
|-----------------------|----------------------|----------------|
| Hardness at 78 F | ASTM D2240 Shore "D" | 50-65 |
| Tensile strength, psi | ASTM D1708 | 2800 Min. |
| Elongation, percent | ASTM D1708 | 200 Min. |
| Specific gravity | ASTM D792 | 2.16 +/- 0.03 |
| Melting point | ASTM D4591 | 621 +/- 18 F |
| | | |

514.3.2 Adjusting Floor Drains

Correct errata by clarifying priming and painting requirements for adjusted floor drains.

(1) If the plans show or contract specifies, provide new drain frames and inserts. Fabricate, blast clean, and apply a shop coat of primer. Touch up areas of damaged primer after installation with a department-approved organic zinc-rich primer.

657.2.2.1.1 General

Correct errata by eliminating the reference to department provided arms in the last sentence.

(1) Furnish shop drawings as specified in 506.3.2, except submit 5 copies with the materials list. Ensure the drawings contain sufficient detail to allow satisfactory review and show the outside diameters of the pole at the butt, top, and splice locations the plans show. Show the width, depth, length, and thickness of all material, and list pertinent ASTM specification designations and metal alloy designations together with the tensile strength of metallic members. Provide tightening procedures for arm-to-pole connections on the shop drawings.

657.2.2.1.4 Poles Designed Under Legacy Standards

Correct errata by deleting the entire subsection to eliminate redundant language.

657.2.2.2 Trombone Arms

Correct errata by changing the reference from 657.2.2.1.3 to 657.2.2.1.2.

(1) Design aluminum trombone arms as specified in 657.2.2.1.2 based on the completed maximum loading configuration the plans show. Furnish shop drawings conforming to 657.2.2.1.1 that show the width, depth, length, and thickness of all members. Also list the ASTM alloy designation and strength of each aluminum member on the shop drawings.

715.3.1.2.2 Lots by Lane-Feet

Correct errata ride spec reference from "the special provisions" to "440.3.4.2."

- (1) The contractor may designate slip-formed pavement lots and sublots conforming to the following:
 - Lots and sublots are one paving pass wide and may include one or more travel lanes, integrally placed shoulders, integrally placed ancillary concrete, and pavement gaps regardless of mix design and placement method.
 - Sublots are 1000 feet long for single-lane and 500 feet long for two-lane paving. Align sublot limits with ride segment limits defined in 440.3.4.2. Adjust terminal sublot lengths to match the project length or, for staged construction, the stage length. Ensure that sublot limits match for adjacent paving passes. Pavement gaps do not affect the location of sublot limits.
 - Create lots by grouping 4 to 8 adjacent sublots matching lots created for adjacent paving passes.

ADDITIONAL SPECIAL PROVISION 7

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

ADDITIONAL SPECIAL PROVISION 9 Electronic Certified Payroll Submittal

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

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

- (2) Ensure that all tiers of subcontractors, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.
- (3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Paul Ndon at (414) 438-4584 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 contact Paul Ndon. Not every contractor's payroll system is capable of producing export files. For details, see pages 17-22 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at:

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

Non-discrimination Provisions

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- 1. Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- **2. Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- **3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- **4. Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
- **5. Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

Effective August 2015 letting

BUY AMERICA PROVISION

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or \$2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this "Buy America" provision.

http://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

http://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc

1 of 1

Effective with February 2017 Letting

WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION AND SYSTEM DEVELOPMENT

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

- I. Prevailing Wage Rates, Hours of Labor, and Payment of Wages
- II. Payroll Requirements
- **III.** Postings at the Site of the Work
- IV. Wage Rate Distribution
- V. Additional Classifications

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

The U.S. Department of Labor (Davis-Bacon Minimum Wage Rates) attached hereto and made a part hereof furnishes the prevailing wage rates pursuant to Section 84.062 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the 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 84.062, Stats. Apprentices shall be paid at rates not less than those prescribed in their apprenticeship contract.

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

Pursuant to Section 16.856 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 base rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half:

January 1
Last Monday in May
July 4
First Monday in September
Fourth Thursday in November
December 25
The day before if January 1. July

The day before if January 1, July 4 or December 25 falls on a Saturday, and

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, euclid 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.

II. PAYROLL REQUIREMENTS

All contractors and subcontractors must submit weekly Certified Payrolls and Compliance Statement verifying that all laborers, workers, mechanics and truckdrivers working on the project have been paid the prevailing wage rates for all workperformed under the contract required by Section 84.062 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 and accessible place at the site of work:

- a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 84.062 of the Wisconsin Statutes.
- b. A copy of the U.S. Department of Labor (Davis-Bacon, Minimum Wage Rates).
- c. A copy of the contractor's Equal Employment Opportunity Policy.

All required documents shall be posted by the first day of work and be accurate and complete. Postings must be readable, in an area where they will be noticed, and maintained until the last day of work.

IV. WAGE RATE REDISTRIBUTION

A contractor or subcontractor performing work subject to a Davis-Bacon wage determination may discharge its minimum wage obligations for the payment of both straight time wages and fringe benefits by (1) paying both in cash, (2) making payments or incurring costs for bona fide fringe benefits, or (3) by a combination thereof. Thus, under the Davis-Bacon a contractor may offset an amount of monetary wages paid in excess of the minimum wage required under the determination to satisfy its fringe benefit obligations. *See* 40 USC 3142(d) and 29 CFR 5.31.

V. ADDITIONAL CLASSIFICATIONS

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 (29CFR 5.5(a)(1)(ii)). 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:

- a. The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- b. The classification is utilized in the area by the construction industry; and
- c. The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

General Decision Number: WI170010 04/28/2017 WI10

Superseded General Decision Number: WI20160010

State: Wisconsin

Construction Type: Highway

Counties: Wisconsin Statewide.

HIGHWAY, AIRPORT RUNWAY & TAXIWAY CONSTRUCTION PROJECTS (does not include bridges over navigable waters; tunnels; buildings in highway rest areas; and railroad construction)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

| Modification | Number | Publication Date |
|--------------|--------|------------------|
| 0 | | 01/06/2017 |
| 1 | | 02/03/2017 |
| 2 | | 02/10/2017 |
| 3 | | 02/24/2017 |
| 4 | | 03/17/2017 |
| 5 | | 03/31/2017 |
| 6 | | 04/21/2017 |
| 7 | | 04/28/2017 |

BRWI0001-002 06/01/2016

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES

| | Rates | Fringes |
|-------------------------|-----------|---------|
| BRICKLAYER | .\$ 31.84 | 20.95 |
| BRWI0002-002 06/01/2016 | | |

ASHLAND, BAYFIELD, DOUGLAS, AND IRON COUNTIES

| | Rates | Fringes |
|-------------------------|-----------|---------|
| BRICKLAYER | .\$ 37.04 | 19.70 |
| BRWI0002-005 06/01/2016 | | |

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA,

CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

| | Rates | Fringes |
|---------------------------------|----------|---------|
| CEMENT MASON/CONCRETE FINISHER. | \$ 35.07 | 20.51 |
| | | |

BRWI0003-002 06/01/2016

BROWN, DOOR, FLORENCE, KEWAUNEE, MARINETTE, AND OCONTO COUNTIES

| | Rates | Fringes |
|-------------------------|----------|---------|
| BRICKLAYER | \$ 32.22 | 20.57 |
| BRWI0004-002 06/01/2016 | | |

KENOSHA, RACINE, AND WALWORTH COUNTIES

| | Rates | Fringes | |
|-------------------------|----------|---------|---|
| BRICKLAYER | \$ 36.59 | 21.49 | |
| BRWI0006-002 06/01/2016 | | | _ |

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE, ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

| | Rates | Fringes |
|-------------------------|-----------|---------|
| BRICKLAYER | .\$ 33.04 | 19.75 |
| BRWI0007-002 06/01/2016 | | |

GREEN, LAFAYETTE, AND ROCK COUNTIES

| | Rates | Fringes |
|-------------------------|-----------|---------|
| BRICKLAYER | .\$ 33.53 | 20.95 |
| BRWI0008-002 06/01/2016 | | |

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

| | Rates | Fringes | |
|-------------------------|----------|---------|--|
| BRICKLAYER | \$ 36.98 | 20.62 | |
| BRWI0011-002 06/01/2016 | | | |

CALUMET, FOND DU LAC, MANITOWOC, AND SHEBOYGAN COUNTIES

Rates Fringes

BRICKLAYER.....\$ 32.22 20.57

BRWI0019-002 06/01/2016

BARRON, BUFFALO, BURNETT, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, ST. CROIX, SAWYER AND WASHBURN COUNTIES

Rates Fringes

BRICKLAYER.....\$ 31.98 20.81

BRWI0034-002 06/01/2015

COLUMBIA AND SAUK COUNTIES

BURNETT (W. of Hwy 48), PIERCE (W. of Hwy 29), POLK (W. of Hwys 35, 48 & 65), AND ST. CROIX (W. of Hwy 65) COUNTIES

Rates Fringes

Carpenter & Piledrivermen.....\$ 36.85 18.39

CARP0252-002 06/01/2016

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO, BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except area bordering Michigan State Line), FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE,

PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

| | Rates | Fringes | |
|------------|----------|---------|--|
| CARPENTER | | | |
| CARPENTER | \$ 33.56 | 18.00 | |
| MILLWRIGHT | \$ 35.08 | 18.35 | |
| PILEDRIVER | \$ 34.12 | 18.00 | |
| | | | |

CARP0252-010 06/01/2016

ASHLAND COUNTY

Rates Fringes

Carpenters

| Carpenter | \$ 33.56 | 18.00 |
|-------------|----------|-------|
| Millwright | \$ 35.08 | 18.35 |
| Pile Driver | \$ 34.12 | 18.00 |
| | | |

CARP0264-003 06/01/2016

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

| | Rates | Fringes |
|-------------------------|----------|---------|
| CARPENTER | \$ 35.78 | 22.11 |
| CARP0361-004 05/01/2016 | | |

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

| | Rates | Fringes |
|-------------------------|----------|---------|
| CARPENTER | \$ 34.57 | 18.16 |
| CARP2337-001 06/01/2016 | | |

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

ELEC0014-002 05/30/2016

| | Rates | Fringes |
|---------------|----------|---------|
| PILEDRIVERMAN | | |
| Zone A | \$ 31.03 | 22.69 |
| Zone B | \$ 31.03 | 22.69 |
| | | |

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Maryville, Colby, Unity, Sherman, Fremont, Lynn & 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

| | Rates | Fringes |
|-------------------------|----------|---------|
| Electricians: | \$ 32.00 | 19.28 |
| ELEC0014-007 05/30/2016 | | |

REMAINING COUNTIES

| F | Rates | Fringes |
|-----------------------------------|-------|---------|
| Teledata System Installer | | |
| <pre>Installer/Technician\$</pre> | 24.35 | 13.15 |

Low voltage construction, installation, maintenance and

removal of teledata facilities (voice, data, and video) including outside plant, telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated systems digital network).

ELEC0127-002 06/01/2016

KENOSHA COUNTY

Rates Fringes

Electricians:.....\$ 37.71 30%+10.02

ELEC0158-002 05/30/2016

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, MENOMINEE (East of a ine 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and 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

| | Rates | Fringes |
|---------------|-----------|---------|
| Electricians: | .\$ 36.50 | 20.39 |
| | | |

* ELEC0219-004 06/01/2016

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

| | Rates | Fringes |
|---|----------|---------|
| Electricians: Electrical contracts over | | |
| \$180,000 Electrical contracts unde | \$ 32.38 | 18.63 |
| \$180,000 | | 18.42 |

ELEC0242-005 05/29/2016

DOUGLAS COUNTY

| | Rates | Fringes | |
|-------------------------|----------|---------|--|
| Electricians: | \$ 34.92 | 25.05 | |
| ELEC0388-002 05/30/2016 | | | |

ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES

| | Rates | Fringes | |
|-------------------------|----------|---------------|--|
| Electricians: | \$ 30.69 | 26.00% +10.05 | |
| ELEC0430-002 06/01/2016 | | | |

RACINE COUNTY (Except Burlington Township)

| | Rates | Fringes | |
|-------------------------|----------|---------|---|
| Electricians: | \$ 36.07 | 21.84 | |
| ELEC0494-005 06/01/2016 | | | _ |

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

| | Rates | Fringes |
|-------------------------|-----------|---------|
| Electricians: | .\$ 36.01 | 24.00 |
| ELEC0494-006 06/01/2014 | | |

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

| | Rates | Fringes |
|-------------------------|----------|---------|
| Electricians: | \$ 29.64 | 20.54 |
| ELEC0494-013 06/01/2015 | | |

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

| F | Rates | Fringes |
|------------------------|-------|---------|
| Sound & Communications | | |
| Installer\$ | 16.47 | 14.84 |
| Technician\$ | 26.00 | 17.70 |

Installation, testing, maintenance, operation and servicing

of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillion, antenna distribution systems, clock and program systems and low-voltage systems such as visual nurse call, audio/visual nurse call systems, doctors entrance register systems. Includes all wire and cable carrying audio, visual, data, light and radio frequency signals. Includes the installation of conduit, wiremold, or raceways in existing structures that have been occupied for six months or more where required for the protection of the wire or cable, but does not mean a complete conduit or raceway system. work covered does not include the installation of conduit, wiremold or any raceways in any new construction, or the installation of power supply outlets by means of which external electric power is supplied to any of the foregoing equipment or products

ELEC0577-003 05/30/2016

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, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

| | Rates | Fringes | |
|---------------|----------|---------|--|
| Electricians: | \$ 30.68 | 17.28 | |
| | | | |

ELEC0890-003 06/01/2016

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

| | Rates | | Fringes |
|-------------------------|----------|--------|-----------|
| Electricians: | \$ 32.45 | 26.10% | + \$10.56 |
| ELEC0953-001 07/01/2015 | | | |

| Line Construction: (1) Lineman\$ 42.14 32% + 5.00 (2) Heavy Equipment Operator\$ 40.03 32% + 5.00 (3) Equipment Operator\$ 33.71 32% + 5.00 (4) Heavy Groundman Driver\$ 26.78 14.11 (5) Light Groundman Driver\$ 24.86 13.45 (6) Groundsman\$ 23.18 32% + 5.00 | |
|--|--|

ENGI0139-005 06/01/2016

Rates Fringes

Power Equipment Operator

| Group 1 | \$ 39.27 | 21.80 |
|---------|-------------|-------|
| Group 2 | \$ 38.77 | 21.80 |
| Group 3 | \$ 38.27 | 21.80 |
| Group 4 | \$ 38.01 | 21.80 |
| Group 5 | \$ 37.72 | 21.80 |
| Group 6 | \$ 31.82 | 21.80 |

HAZARDOUS WASTE PREMIUMS:

EPA Level "A" protection - \$3.00 per hour EPA Level "B" protection - \$2.00 per hour EPA Level "C" protection - \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, tower cranes, and derricks with or without attachments with a lifting capacity of over 100 tons; or cranes, tower cranes, and derricks with boom, leads and/or jib lengths measuring 176 feet or longer.

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 jibs lengths measuring 175 feet or under and Backhoes (excavators) weighing 130,000 lbs and over; caisson rigs; pile driver; dredge operator; dredge engineer; Boat Pilot.

GROUP 3: Mechanic or welder - Heavy duty equipment; cranes with a lifting capacity of 25 tons or under; concrete breaker (manual or remote); vibratory/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pvt. spreader heavy duty (rubber tired); concrete spreader & distributor; automatic subgrader (concrete); concrete grinder & planing machine; concrete slipform curb & gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi & over); bridge paver; concrete conveyor system; concrete pump; Rotec type Conveyor; stabilizing mixer (self-propelled); shoulder widener; asphalt plant engineer; bituminious paver; bump cutter & grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer & scarifier; Backhoes (excavators) weighing under 130,000 lbs; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader; hydraulic backhoe (tractor type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller over 5 tons; percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches & A-frames; post driver; material hoist.

GROUP 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self propelled; tractor (mounted or towed compactors & light equipment); shouldering machine; self- propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint sawer (multiple blade) belting machine; burlap machine; texturing machine; tractor endloader (rubber tired) - light; jeep digger; forklift; mulcher; launch operator; fireman, environmental burner

GROUP 5: Air compressor; power pack; vibrator hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; Concrete proportioning plants; generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; Oiler, pump (over 3 inches); Drilling Machine Tender.

GROUP 6: Off-road material hauler with or without ejector.

IRON0008-002 06/01/2016

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

Rates Fringes
IRONWORKER.....\$30.86 25.42

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksqiving Day & Christmas Day.

IRON0008-003 06/01/2016

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes
IRONWORKER.....\$ 33.15 25.42

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0383-001 06/01/2015

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST, GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA, JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON, MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA, WAUSHARA, AND WOOD COUNTIES

Rates Fringes

IRONWORKER.....\$ 32.85 21.84

IRON0498-005 06/01/2016

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:

Rates Fringes

IRONWORKER.....\$ 36.29 30.77

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPEALEAU COUNTIES

| | Rates | Fringes |
|----------------------------|----------|---------|
| IRONWORKER | \$ 35.50 | 23.45 |
| TROYOF1 0 001 05 /01 /0015 | | |

IRON0512-021 05/01/2015

IRON0512-008 05/01/2015

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

| | Rates | Fringes |
|-------------------------|----------|---------|
| IRONWORKER | \$ 31.04 | 23.45 |
| LABO0113-002 06/01/2016 | | |

MILWAUKEE AND WAUKESHA COUNTIES

| | I | Rates | Fringes |
|---------|-----|-------|---------|
| LABORER | | | |
| Group | 1\$ | 27.51 | 20.35 |
| Group | 2\$ | 27.66 | 20.35 |
| Group | 3\$ | 27.86 | 20.35 |
| Group | 4\$ | 28.01 | 20.35 |
| Group | 5\$ | 28.16 | 20.35 |
| Group | 6\$ | 24.00 | 20.35 |

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

LABO0113-003 06/01/2016

OZAUKEE AND WASHINGTON COUNTIES

| | E | Rates | Fringes |
|---------|-----|-------|---------|
| LABORER | | | |
| Group | 1\$ | | 20.35 |
| - | 2\$ | | 20.35 |
| - | 3\$ | | 20.35 |
| - | 4\$ | | 20.35 |
| - | 5\$ | | 20.35 |
| Group | 6\$ | 23.85 | 20.35 |

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson and Traffic Control Person

LABO0113-011 06/01/2016

KENOSHA AND RACINE COUNTIES

| | | Rates | Fringes |
|---------|---|-----------|---------|
| LABORER | | | |
| Group | 1 | .\$ 26.57 | 20.35 |
| Group | 2 | .\$ 26.72 | 20.35 |
| Group | 3 | .\$ 26.92 | 20.35 |
| Group | 4 | .\$ 26.89 | 20.35 |
| Group | 5 | .\$ 27.22 | 20.35 |
| Group | 6 | \$ 23.71 | 20.35 |

LABORERS CLASSIFICATIONS:

GROUP 1: General laborer; Tree Trimmer; Conduit Layer;

Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagman; traffic control person

LABO0140-002 06/01/2016

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IRON, JACKSON, JUNEAU, IOWA, JEFFERSON, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX, TAYLOR, TREMPEALEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

| | | Rates | Fringes |
|---------|---|----------|---------|
| LABORER | | | |
| Group | 1 | \$ 30.67 | 16.55 |
| Group | 2 | \$ 30.77 | 16.55 |
| Group | 3 | \$ 30.82 | 16.55 |
| Group | 4 | \$ 31.02 | 16.55 |
| Group | 5 | \$ 30.87 | 16.55 |
| Group | 6 | \$ 27.30 | 16.55 |

LABORER CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bitminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator, Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk and Pavement); Strike Off Man

GROUP 4: Line and Grade Secialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

LABO0464-003 06/01/2016

DANE COUNTY

| | | Rates | Fringes |
|---------|---|-----------|---------|
| LABORER | | | |
| Group | 1 | .\$ 30.95 | 16.41 |
| Group | 2 | .\$ 31.05 | 16.41 |
| Group | 3 | .\$ 31.10 | 16.41 |
| Group | 4 | .\$ 31.30 | 16.41 |
| Group | 5 | .\$ 31.15 | 16.41 |
| | 6 | | 16.41 |

LABORERS CLASSIFICATIONS:

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminious Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; Powderman

GROUP 6: Flagperson and Traffic Control Person

PAIN0106-008 05/02/2016

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

| | I | Rates | Fringes |
|-----------|--------------------|-------|---------|
| Painters: | | | |
| New: | | | |
| Brush, | Roller\$ | 29.86 | 16.35 |
| Spray, | Sandblast, Steel\$ | 30.46 | 16.35 |

| Repaint: Brush, Roller Spray, Sandblast, Steel | | 16.35 16.35 |
|---|----------------------|-------------------------|
| PAIN0108-002 06/01/2016 | | |
| RACINE COUNTY | | |
| | Rates | Fringes |
| Painters: Brush, Roller Spray & Sandblast | | 18.70 18.70 |
| PAIN0259-002 05/01/2008 | | |
| BARRON, CHIPPEWA, DUNN, EAU CLASSAWYER, ST. CROIX, AND WASHBURN | | PIERCE, POLK, RUSK, |
| | Rates | Fringes |
| PAINTER | \$ 24.11 | 12.15 |
| PAIN0259-004 05/01/2015 | | |
| BUFFALO, CRAWFORD, JACKSON, LA OVERNON COUNTIES | CROSSE, MONI | ROE, TREMPEALEAU, AND |
| | Rates | Fringes |
| PAINTER | \$ 22.03 | 12.45 |
| PAIN0781-002 06/01/2016 | | |
| JEFFERSON, MILWAUKEE, OZAUKEE, W | VASHINGTON, | AND WAUKESHA COUNTIES |
| | Rates | Fringes |
| Painters: Bridge Brush Spray & Sandblast | \$ 30.07 \$ 30.82 | 22.19 22.19 22.19 |
| PAIN0802-002 06/01/2016 | | |
| COLUMBIA, DANE, DODGE, GRANT, GEROCK, AND SAUK COUNTIES | REEN, IOWA, | LAFAYETTE, RICHLAND, |
| | Rates | Fringes |
| PAINTER Brush | \$ 27.50 | 17.72 |

Structural Steel, Spray, Bridges = \$1.00 additional per hour.

PREMIUM PAY:

PAIN0802-003 06/01/2016

ADAMS, BROWN, CALUMET, CLARK, DOOR, FOND DU LAC, FOREST, GREEN LAKE, IRON, JUNEAU, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, PORTAGE, PRICE, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WAUSHARA, WAUPACA, WINNEBAGO, AND WOOD COUNTIES

| | Rates | Fringes |
|-------------------------|----------|---------|
| PAINTER | \$ 24.39 | 11.72 |
| PAIN0934-001 06/01/2016 | | |

KENOSHA AND WALWORTH COUNTIES

| | Rates | Fringes | |
|------------------|----------|---------|--|
| Painters: | | | |
| Brush | \$ 32.74 | 18.70 | |
| Spray | \$ 33.74 | 18.70 | |
| Structural Steel | \$ 32.89 | 18.70 | |
| | | | |

PAIN1011-002 06/01/2016

FLORENCE COUNTY

| | Rates | Fringes |
|-----------|----------|---------|
| Painters: | \$ 24.56 | 11.93 |
| | | |

PLAS0599-010 06/01/2016

| | Rates | Fringes |
|--------------------------------|----------|---------|
| CEMENT MASON/CONCRETE FINISHER | | |
| Area 1 | \$ 39.46 | 17.17 |
| Area 2 (BAC) | \$ 35.07 | 19.75 |
| Area 3 | \$ 35.61 | 19.40 |
| Area 4 | \$ 34.70 | 20.51 |
| Area 5 | \$ 36.27 | 18.73 |
| Area 6 | \$ 32.02 | 22.99 |

AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA

CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPEALEAU, AND VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2016

| | Rates | Fringes |
|--|----------|---------|
| TRUCK DRIVER 1 & 2 Axles 3 or more Axles; Euclids Dumptor & Articulated, | \$ 26.63 | 19.85 |
| Truck Mechanic | \$ 26.78 | 19.85 |
| WELL DRILLER | \$ 16.52 | 3.70 |

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

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 (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage

determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current

negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

March 2017

NOTICE TO BIDDERS WAGE RATE DECISION

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

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

If a project includes multiple types of construction (highway, bridge over navigable water, sanitary sewer and water main, building) and there is not a separate wage determination for this type of work included in the proposal, use the wage determination that is in the proposal.





Proposal Schedule of Items

Page 1 of 16

Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|--|--------------------------------------|------------|------------|
| 0010 | 108.4400 CPM Progress Schedule | 1.000 EACH | | |
| 0020 | 201.0105 Clearing | 11.000 STA | | |
| 0030 | 201.0120 Clearing | 120.000 ID | | |
| 0040 | 201.0205 Grubbing | 11.000 STA | · | |
| 0050 | 201.0220 Grubbing | 120.000 ID | · | <u> </u> |
| 0060 | 203.0100 Removing Small Pipe Culverts | 21.000 EACH | | |
| 0070 | 204.0100 Removing Pavement | 14,558.000 SY | | |
| 0800 | 204.0150 Removing Curb & Gutter | 197.000 LF | | |
| 0090 | 204.0210 Removing Manholes | 3.000 EACH | | |
| 0100 | 204.0245 Removing Storm Sewer (size) 008. 18- Inch | 35.000 LF | | |
| 0110 | 204.0245 Removing Storm Sewer (size) 014. 24x38-Inch | 59.000 LF | | |
| 0120 | 204.9060.S Removing (item description) 001. Wooden Bollards | 4.000 EACH | | |
| 0130 | 204.9060.S Removing (item description) 002. Cover Plates Left In Place | 3.000 EACH | | |
| 0140 | 204.9165.S Removing (item description) 001. Concrete Median Sloped Nose | 159.000 SF | | · |
| 0150 | 205.0100 Excavation Common | 57,605.000 CY | | |





Proposal Schedule of Items

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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|---|--------------------------------------|------------|------------|
| 0160 | 213.0100 Finishing Roadway (project) 002. 1030- 11-71 | 1.000 EACH | | |
| 0170 | 305.0110 Base Aggregate Dense 3/4-Inch | 1,166.000 TON | | |
| 0180 | 305.0120 Base Aggregate Dense 1 1/4-Inch | 35,225.000 TON | | |
| 0190 | 310.0115 Base Aggregate Open-Graded | 30.000 CY | | |
| 0200 | 312.0110 Select Crushed Material | 28,220.000 TON | | |
| 0210 | 371.1000.S QMP Base Aggregate Dense 1 1/4-Inch Compaction | 35,225.000 TON | | |
| 0220 | 415.0095 Concrete Pavement 9 1/2-Inch | 8,334.000 SY | | |
| 0230 | 415.0105 Concrete Pavement 10 1/2-Inch | 22,835.000 SY | | |
| 0240 | 416.0160 Concrete Driveway 6-Inch | 68.000 SY | | · |
| 0250 | 416.1010 Concrete Surface Drains | 26.000 CY | | · |
| 0260 | 440.4410 Incentive IRI Ride | 7,651.000 DOL | 1.00000 | 7,651.00 |
| 0270 | 455.0605 Tack Coat | 2,306.000 GAL | | |
| 0280 | 460.2000 Incentive Density HMA Pavement | 5,410.000 DOL | 1.00000 | 5,410.00 |
| 0290 | 460.7223 HMA Pavement 3 HT 58-28 S | 6,341.000 TON | | |
| 0300 | 460.7224 HMA Pavement 4 HT 58-28 S | 2,113.000 TON | · | |
| 0310 | 465.0120 Asphaltic Surface Driveways and Field Entrances | 179.000 TON | | |





Proposal Schedule of Items

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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|--|--------------------------------------|------------|------------|
| 0320 | 465.0125 Asphaltic Surface Temporary | 1,277.000 TON | | |
| 0330 | 495.1000.S Cold patch | 20.000 TON | | |
| 0340 | 504.0900 Concrete Masonry Endwalls | 3.800 CY | | |
| 0350 | 520.1018 Apron Endwalls for Culvert Pipe 18-Inch | 2.000 EACH | | |
| 0360 | 520.1024 Apron Endwalls for Culvert Pipe 24-Inch | 4.000 EACH | | |
| 0370 | 520.1030 Apron Endwalls for Culvert Pipe 30-Inch | 2.000 EACH | | |
| 0380 | 520.1036 Apron Endwalls for Culvert Pipe 36-Inch | 2.000 EACH | | |
| 0390 | 520.3318 Culvert Pipe Class III-A 18-Inch | 42.000 LF | | |
| 0400 | 520.3324 Culvert Pipe Class III-A 24-Inch | 89.000 LF | | |
| 0410 | 520.3330 Culvert Pipe Class III-A 30-Inch | 35.000 LF | | |
| 0420 | 520.3336 Culvert Pipe Class III-A 36-Inch | 77.000 LF | | |
| 0430 | 520.8000 Concrete Collars for Pipe | 5.000 EACH | | |
| 0440 | 522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch | 2.000 EACH | | |
| 0450 | 522.1015 Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch | 1.000 EACH | | <u></u> |
| 0460 | 522.1036 Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch | 2.000 EACH | | |





Proposal Schedule of Items

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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|--|--------------------------------------|------------|------------|
| 0470 | 523.0419 Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch | 211.000 LF | | |
| 0480 | 523.0424 Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch | 327.000 LF | · | · |
| 0490 | 523.0429 Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch | 58.000 LF | | <u> </u> |
| 0500 | 523.0519 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch | 4.000 EACH | | |
| 0510 | 523.0524 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch | 2.000 EACH | · | |
| 0520 | 523.0529 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch | 2.000 EACH | | |
| 0530 | 601.0409 Concrete Curb & Gutter 30-Inch Type A | 13,284.000 LF | | |
| 0540 | 601.0411 Concrete Curb & Gutter 30-Inch Type D | 4,057.000 LF | | |
| 0550 | 602.0410 Concrete Sidewalk 5-Inch | 60,692.000 SF | | |
| 0560 | 602.2400 Concrete Safety Islands | 3,457.000 SF | | |
| 0570 | 606.0100 Riprap Light | 57.000 CY | | |
| 0580 | 606.0200 Riprap Medium | 96.000 CY | | |
| 0590 | 608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch | 279.000 LF | | |





Proposal Schedule of Items

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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|--|--------------------------------------|------------|------------|
| 0600 | 608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch | 126.000 LF | · | |
| 0610 | 608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch | 68.000 LF | | <u> </u> |
| 0620 | 608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch | 1,387.000 LF | | |
| 0630 | 608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch | 651.000 LF | · | |
| 0640 | 608.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch | 631.000 LF | | |
| 0650 | 608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch | 1,696.000 LF | | |
| 0660 | 608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch | 140.000 LF | · | |
| 0670 | 608.0436 Storm Sewer Pipe Reinforced Concrete Class IV 36-Inch | 88.000 LF | · | |
| 0680 | 608.3012 Storm Sewer Pipe Class III-A 12-Inch | 61.000 LF | | |
| 0690 | 608.3015 Storm Sewer Pipe Class III-A 15-Inch | 47.000 LF | | |
| 0700 | 610.0419 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30- Inch | 282.000 LF | <u></u> | · |
| 0710 | 611.0535 Manhole Covers Type J-Special | 17.000 EACH | | |
| 0720 | 611.0606 Inlet Covers Type B | 2.000 EACH | | |
| 0730 | 611.0624 Inlet Covers Type H | 86.000 EACH | | |





Proposal Schedule of Items

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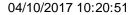
Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|---|--------------------------------------|------------|------------|
| 0740 | 611.0642 Inlet Covers Type MS | 2.000 EACH | · | |
| 0750 | 611.2004 Manholes 4-FT Diameter | 5.000 EACH | · | |
| 0760 | 611.2006 Manholes 6-FT Diameter | 15.000 EACH | | |
| 0770 | 611.2007 Manholes 7-FT Diameter | 1.000 EACH | | |
| 0780 | 611.3003 Inlets 3-FT Diameter | 2.000 EACH | | · |
| 0790 | 611.3004 Inlets 4-FT Diameter | 79.000 EACH | | |
| 0800 | 611.3901 Inlets Median 1 Grate | 2.000 EACH | | |
| 0810 | 611.8115 Adjusting Inlet Covers | 2.000 EACH | · | |
| 0820 | 611.8120.S Cover Plates Temporary | 13.000 EACH | | |
| 0830 | 611.9800.S Pipe Grates | 6.000 EACH | | |
| 0840 | 612.0106 Pipe Underdrain 6-Inch | 815.000 LF | | |
| 0850 | 612.0700 Drain Tile Exploration | 2,000.000 LF | | |
| 0860 | 616.0700.S Fence Safety | 5,000.000 LF | | |
| 0870 | 618.0100 Maintenance And Repair of Haul Roads (project) 002. 1030-11-71 | 1.000 EACH | | |
| 0880 | 619.1000 Mobilization | 1.000 EACH | | |
| 0890 | 620.0100 Concrete Corrugated Median | 1,169.000 SF | · | |







Proposal Schedule of Items

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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|---|--------------------------------------|------------|------------|
| 0900 | 620.0300 Concrete Median Sloped Nose | 2,895.000 SF | · | |
| 0910 | 621.0100 Landmark Reference Monuments | 3.000 EACH | | |
| 0920 | 623.0200 Dust Control Surface Treatment | 63,855.000 SY | | |
| 0930 | 624.0100 Water | 643.000 MGAL | | · |
| 0940 | 625.0500 Salvaged Topsoil | 48,676.000 SY | | |
| 0950 | 627.0200 Mulching | 48,676.000 SY | | |
| 0960 | 628.1104 Erosion Bales | 36.000 EACH | | · |
| 0970 | 628.1504 Silt Fence | 4,845.000 LF | · | · |
| 0980 | 628.1520 Silt Fence Maintenance | 4,845.000 LF | | |
| 0990 | 628.1905 Mobilizations Erosion Control | 6.000 EACH | | |
| 1000 | 628.1910 Mobilizations Emergency Erosion Control | 6.000 EACH | | |
| 1010 | 628.1920 Cleaning Sediment Basins | 6.000 CY | | |
| 1020 | 628.2004 Erosion Mat Class I Type B | 60,692.000 SY | | · |
| 1030 | 628.7005 Inlet Protection Type A | 108.000 EACH | | |
| 1040 | 628.7020 Inlet Protection Type D | 103.000 EACH | <u></u> | |
| 1050 | 628.7504 Temporary Ditch Checks | 453.000 LF | <u> </u> | |
| 1060 | 628.7555 Culvert Pipe Checks | 13.000 EACH | | |
| | | | | |





Proposal Schedule of Items

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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|--|--------------------------------------|------------|------------|
| 1070 | 628.7560 Tracking Pads | 4.000 EACH | | |
| 1080 | 629.0210 Fertilizer Type B | 31.000 CWT | | |
| 1090 | 630.0130 Seeding Mixture No. 30 | 875.000 LB | • | |
| 1100 | 630.0200 Seeding Temporary | 219.000 LB | | |
| 1110 | 633.5200 Markers Culvert End | 13.000 EACH | | |
| 1120 | 634.0618 Posts Wood 4x6-Inch X 18-FT | 153.000 EACH | | |
| 1130 | 637.2210 Signs Type II Reflective H | 943.240 SF | | |
| 1140 | 637.2215 Signs Type II Reflective H Folding | 82.160 SF | | |
| 1150 | 637.2230 Signs Type II Reflective F | 272.500 SF | · | |
| 1160 | 638.2102 Moving Signs Type II | 29.000 EACH | | |
| 1170 | 638.2602 Removing Signs Type II | 74.000 EACH | | |
| 1180 | 638.3000 Removing Small Sign Supports | 109.000 EACH | | |
| 1190 | 641.8100 Overhead Sign Support (structure) 001. S-51-217 | LS | LUMP SUM | |
| 1200 | 641.8100 Overhead Sign Support (structure) 002. S-51-240 | LS | LUMP SUM | |
| 1210 | 641.8100 Overhead Sign Support (structure) 003. S-51-216 | LS | LUMP SUM | |
| 1220 | 643.0100 Traffic Control (project) 002. 1030-11-71 | 1.000 EACH | | |





Proposal Schedule of Items

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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|---|--------------------------------------|------------|------------|
| 1230 | 643.0300 Traffic Control Drums | 22,199.000 DAY | | |
| 1240 | 643.0420 Traffic Control Barricades Type III | 6,143.000 DAY | | |
| 1250 | 643.0500 Traffic Control Flexible Tubular Marker Posts | 23.000 EACH | | · |
| 1260 | 643.0600 Traffic Control Flexible Tubular Marker Bases | 23.000 EACH | · | |
| 1270 | 643.0705 Traffic Control Warning Lights Type A | 6,156.000 DAY | <u>.</u> | |
| 1280 | 643.0715 Traffic Control Warning Lights Type C | 6,160.000 DAY | | |
| 1290 | 643.0900 Traffic Control Signs | 8,804.000 DAY | | |
| 1300 | 643.0910 Traffic Control Covering Signs Type I | 6.000 EACH | | |
| 1310 | 643.0920 Traffic Control Covering Signs Type II | 31.000 EACH | | |
| 1320 | 643.1000 Traffic Control Signs Fixed Message | 448.000 SF | | |
| 1330 | 643.1050 Traffic Control Signs PCMS | 1,713.000 DAY | | |
| 1340 | 643.2000 Traffic Control Detour (project) 001. 1030-11-71 | 1.000 EACH | | · |
| 1350 | 643.3000 Traffic Control Detour Signs | 54,856.000 DAY | <u> </u> | |
| 1360 | 645.0111 Geotextile Type DF Schedule A | 4,075.000 SY | | |
| 1370 | 645.0120 Geotextile Type HR | 228.000 SY | | |
| 1380 | 645.0130 Geotextile Type R | 172.000 SY | | |





Proposal Schedule of Items

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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|--|--------------------------------------|------------|------------|
| 1390 | 645.0220 Geogrid Type SR | 63,855.000 SY | | |
| 1400 | 646.0103 Pavement Marking Paint 4-Inch | 2,909.000 LF | | |
| 1410 | 646.0106 Pavement Marking Epoxy 4-Inch | 32,735.000 LF | <u>-</u> | |
| 1420 | 646.0690.S Removing Pavement Markings Water Blasting | 817.000 LF | | |
| 1430 | 646.0842.S Pavement Marking Grooved Contrast Wet Reflective Epoxy 4-Inch | 4,294.000 LF | | |
| 1440 | 646.0844.S Pavement Marking Grooved Contrast Wet Reflective Epoxy 8-Inch | 7,312.000 LF | · | |
| 1450 | 647.0156 Pavement Marking Arrows Epoxy Type 1 | 3.000 EACH | | |
| 1460 | 647.0166 Pavement Marking Arrows Epoxy Type 2 | 31.000 EACH | | |
| 1470 | 647.0176 Pavement Marking Arrows Epoxy Type 3 | 1.000 EACH | | |
| 1480 | 647.0356 Pavement Marking Words Epoxy | 28.000 EACH | | |
| 1490 | 647.0456 Pavement Marking Curb Epoxy | 398.000 LF | | |
| 1500 | 647.0566 Pavement Marking Stop Line Epoxy 18-Inch | 582.000 LF | | · |
| 1510 | 647.0606 Pavement Marking Island Nose Epoxy | 15.000 EACH | | |
| 1520 | 647.0726 Pavement Marking Diagonal Epoxy 12-Inch | 1,370.000 LF | | |
| 1530 | 647.0856 Pavement Marking Concrete Corrugated Median Epoxy | 328.000 SF | | |





Proposal Schedule of Items

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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|---|--------------------------------------|------------|------------|
| 1540 | 649.0400 Temporary Pavement Marking Removable Tape 4-Inch | 18,164.000 LF | | |
| 1550 | 652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch | 3,908.000 LF | | |
| 1560 | 652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch | 2,252.000 LF | | |
| 1570 | 652.0605 Conduit Special 2-Inch | 61.000 LF | | |
| 1580 | 652.0800 Conduit Loop Detector | 1,376.000 LF | | |
| 1590 | 653.0135 Pull Boxes Steel 24x36-Inch | 7.000 EACH | | |
| 1600 | 653.0140 Pull Boxes Steel 24x42-Inch | 34.000 EACH | | |
| 1610 | 653.0905 Removing Pull Boxes | 6.000 EACH | <u>-</u> | |
| 1620 | 654.0101 Concrete Bases Type 1 | 6.000 EACH | | |
| 1630 | 654.0105 Concrete Bases Type 5 | 14.000 EACH | | |
| 1640 | 654.0113 Concrete Bases Type 13 | 4.000 EACH | <u>-</u> | |
| 1650 | 654.0217 Concrete Control Cabinet Bases Type 9 Special | 1.000 EACH | | |
| 1660 | 655.0230 Cable Traffic Signal 5-14 AWG | 512.000 LF | | |
| 1670 | 655.0240 Cable Traffic Signal 7-14 AWG | 1,033.000 LF | | |
| 1680 | 655.0260 Cable Traffic Signal 12-14 AWG | 3,307.000 LF | | |
| 1690 | 655.0305 Cable Type UF 2-12 AWG Grounded | 2,896.000 LF | | |





Proposal Schedule of Items

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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|---|--------------------------------------|------------|------------|
| 1700 | 655.0515 Electrical Wire Traffic Signals 10 AWG | 5,044.000 LF | | |
| 1710 | 655.0610 Electrical Wire Lighting 12 AWG | 3,960.000 LF | | |
| 1720 | 655.0615 Electrical Wire Lighting 10 AWG | 550.000 LF | | |
| 1730 | 655.0620 Electrical Wire Lighting 8 AWG | 8,880.000 LF | · | |
| 1740 | 655.0630 Electrical Wire Lighting 4 AWG | 8,250.000 LF | · | |
| 1750 | 655.0700 Loop Detector Lead In Cable | 6,031.000 LF | | |
| 1760 | 655.0800 Loop Detector Wire | 5,018.000 LF | · | |
| 1770 | 656.0200 Electrical Service Meter Breaker Pedestal (location) 001. CTH K & East Frontage Rd | LS | LUMP SUM | |
| 1780 | 657.0100 Pedestal Bases | 6.000 EACH | | · |
| 1790 | 657.0255 Transformer Bases Breakaway 11 1/2- Inch Bolt Circle | 14.000 EACH | | |
| 1800 | 657.0322 Poles Type 5-Aluminum | 14.000 EACH | | · |
| 1810 | 657.0420 Traffic Signal Standards Aluminum 13-FT | 2.000 EACH | | |
| 1820 | 657.0425 Traffic Signal Standards Aluminum 15-FT | 4.000 EACH | | |
| 1830 | 657.0610 Luminaire Arms Single Member 4 1/2- Inch Clamp 6-FT | 24.000 EACH | | |
| 1840 | 657.1360 Install Poles Type 13 | 4.000 EACH | | |





Proposal Schedule of Items

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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|--|--------------------------------------|------------|------------|
| 1850 | 657.1545 Install Monotube Arms 45-FT | 1.000 EACH | | |
| 1860 | 657.1550 Install Monotube Arms 50-FT | 3.000 EACH | | |
| 1870 | 657.1815 Install Luminaire Arms Steel 15-FT | 8.000 EACH | | |
| 1880 | 658.0110 Traffic Signal Face 3-12 Inch Vertical | 12.000 EACH | | |
| 1890 | 658.0115 Traffic Signal Face 4-12 Inch Vertical | 8.000 EACH | <u> </u> | |
| 1900 | 658.0215 Backplates Signal Face 3 Section 12-Inch | 12.000 EACH | | |
| 1910 | 658.0220 Backplates Signal Face 4 Section 12- Inch | 8.000 EACH | | |
| 1920 | 658.0600 Led Modules 12-Inch Red Ball | 12.000 EACH | | |
| 1930 | 658.0605 Led Modules 12-Inch Yellow Ball | 12.000 EACH | | |
| 1940 | 658.0610 Led Modules 12-Inch Green Ball | 12.000 EACH | | |
| 1950 | 658.0615 Led Modules 12-Inch Red Arrow | 8.000 EACH | | · |
| 1960 | 658.0620 Led Modules 12-Inch Yellow Arrow | 16.000 EACH | | · |
| 1970 | 658.0625 Led Modules 12-Inch Green Arrow | 8.000 EACH | | · |
| 1980 | 658.5069 Signal Mounting Hardware (location) 001. CTH K & East Frontage Rd | LS | LUMP SUM | |
| 1990 | 659.1125 Luminaires Utility LED C | 32.000 EACH | | |
| 2000 | 670.0100 Field System Integrator 300. 1030-11-71 Traffic Signals | LS | LUMP SUM | |
| | - | | | |





Proposal Schedule of Items

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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|---|--------------------------------------|------------|------------|
| 2010 | 670.0200 ITS Documentation 300. 1030-11-71 Traffic Signals | LS | LUMP SUM | |
| 2020 | 678.0500 Communication System Testing 300. 1030-11-71 Traffic Signals | LS | LUMP SUM | |
| 2030 | 690.0150 Sawing Asphalt | 946.000 LF | | |
| 2040 | 690.0250 Sawing Concrete | 267.000 LF | | |
| 2050 | 715.0415 Incentive Strength Concrete Pavement | 9,350.000 DOL | 1.00000 | 9,350.00 |
| 2060 | SPV.0060 Special 001. Field Facilities Office Space | 1.000 EACH | | |
| 2070 | SPV.0060 Special 005. Erosion Control Filter Bags | 25.000 EACH | | |
| 2080 | SPV.0060 Special 010. Removing Flashing Beacon and Pole WB CTH K RT at E Frontage Road | 1.000 EACH | | |
| 2090 | SPV.0060 Special 011. Removing Flashing Beacon and Pole WB CTH K LT at E Frontage Road | 1.000 EACH | <u> </u> | |
| 2100 | SPV.0060 Special 012. Moving Flashing Beacon and Pole EB CTH K RT at W Frontage Road | 1.000 EACH | <u> </u> | · |
| 2110 | SPV.0060 Special 013. Moving Flashing Beacon and Pole EB CTH K LT at W Frontage Road | 1.000 EACH | | |
| 2120 | SPV.0060 Special 030. Silt Fence Drainage Outlet Erosion Control Filter Bags | 1.000 EACH | · | · |
| 2130 | SPV.0060 Special 101. Removing Lighting Units | 8.000 EACH | | |





Proposal Schedule of Items

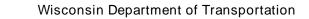
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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|--|--------------------------------------|------------|------------|
| 2140 | SPV.0060 Special 102. Lamp Disposal High Intensity Discharge | 8.000 EACH | | |
| 2150 | SPV.0060 Special 500. Adjusting Water Valves | 13.000 EACH | | |
| 2160 | SPV.0060 Special 502. Remove And Reinstall Mailboxes | 13.000 EACH | | |
| 2170 | SPV.0075 Special 009. Pavement Cleanup | 100.000 HRS | | |
| 2180 | SPV.0090 Special 101. Removing Electrical Wire From Conduit | 2,520.000 LF | | |
| 2190 | SPV.0090 Special 300. Fiber Optic Tracer Wire | 936.000 LF | <u> </u> | |
| 2200 | SPV.0105 Special 002. Survey Project 1030-11-71 | LS | LUMP SUM | |
| 2210 | SPV.0105 Special 003. Concrete Pavement Joint Layout | LS | LUMP SUM | · |
| 2220 | SPV.0105 Special 101. Maintenance of Lighting System | LS | LUMP SUM | |
| 2230 | SPV.0105 Special 102. Freeway Lighting Integrator Id 1030-11-71 | LS | LUMP SUM | <u> </u> |
| 2240 | SPV.0105 Special 103. Lighting System Survey | LS | LUMP SUM | |
| 2250 | SPV.0105 Special 104. Temporary Mailboxes | LS | LUMP SUM | |
| 2260 | SPV.0105 Special 300. Install State Furnished Traffic Signal Cabinet CTH K & East Frontage Rd | LS | LUMP SUM | |
| 2270 | SPV.0105 Special 301. Transport Traffic Signal & Intersection Lighting Materials CTH K & East Frontage Rd | LS | LUMP SUM | · |





Proposal Schedule of Items

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Proposal ID: 20170613006 Project(s): 1030-11-71

Federal ID(s): N/A

SECTION: 0001 Contract Items

| Proposal Line Number | Item ID Description | Approximate Quantity and Units | Unit Price | Bid Amount |
|----------------------------|--|--------------------------------------|------------|------------|
| 2280 | SPV.0105 Special 302. Install Fiber Optic Communications in Cabinet CTH K & East Frontage Rd (CB S51-1438) | LS | LUMP SUM | |
| | Section: | 0001 | Total: | · |
| | | | Total Bid: | _ |

PLEASE ATTACH SCHEDULE OF ITEMS HERE