

# HIGHWAY WORK PROPOSAL

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

Proposal Number:

Ø 9

<u>COUNTY</u>	<u>STATE PROJECT ID</u>	<u>FEDERAL PROJECT ID</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Southeast Region Wide	1000-04-70		Various Park & Rides Various Locations	Non-Highway

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

Proposal Guaranty Required, \$ 75,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: December 13, 2016 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code
Contract Completion Time September 1, 2017	<b>SAMPLE NOT FOR BIDDING PURPOSES</b>
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.

**Do not sign, notarize, or submit this Highway Work Proposal when submitting an electronic bid on the Internet.**

Subscribed and sworn to before me this date \_\_\_\_\_

\_\_\_\_\_  
(Signature, Notary Public, State of Wisconsin)

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

\_\_\_\_\_  
(Date Commission Expires)

Notary Seal

\_\_\_\_\_  
(Bidder Signature)

\_\_\_\_\_  
(Print or Type Bidder Name)

\_\_\_\_\_  
(Bidder Title)

## For Department Use Only

Type of Work Grading, storm sewer, base aggregate dense placement, asphaltic milling and relay, asphaltic pulverizing and relay, HMA pavement, concrete curb and gutter, concrete sidewalk, concrete pavement replacement, high friction surface treatment, pavement marking, signing, lighting.	Date Guaranty Returned
Notice of Award Dated	

**PLEASE ATTACH  
PROPOSAL GUARANTY HERE**

**Effective with November 2007 Letting**

**PROPOSAL REQUIREMENTS AND CONDITIONS**

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

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

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

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

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

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

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

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

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

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

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

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

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

## Effective with August 2015 Letting

### BID PREPARATION

#### Preparing the Proposal Schedule of Items

##### A General

- (1) Obtain bidding proposals as specified in **section 102** of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
  1. Electronic bid on the internet.
  2. Electronic bid on a printout with accompanying diskette or CD ROM.
  3. Paper bid under a waiver of the electronic submittal requirements.
- (2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.

- (3) The department will provide bidding information through the department's web site at:  
<http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 P.M. local time on the Thursday before the letting. Check the department's web site after 5:00 P.M. local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid Express™ on-line bidding exchange at <http://www.bidx.com/> after 5:00 P.M. local time on the Thursday before the letting to ensure that the latest schedule of items Expedite file (\*.ebs or \*.00x) is used to submit the final bid.

- (4) Interested parties can subscribe to the Bid Express™ on-line bidding exchange by following the instructions provided at the [www.bidx.com](http://www.bidx.com) web site or by contacting:

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

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:  
<http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>

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

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

## **B Submitting Electronic Bids**

### **B.1 On the Internet**

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

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

- (1) Download the latest schedule of items from the Wisconsin pages of the Bid Express<sup>TM</sup> 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<sup>TM</sup> 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<sup>TM</sup> web site to assure that the schedule of items is prepared properly.

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

**Bidder**

**Name**

**BN00**

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

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

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

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

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

# PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

## PRINCIPAL

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

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
(Company Name)

\_\_\_\_\_  
(Signature and Title)

## NOTARY FOR PRINCIPAL

\_\_\_\_\_  
(Date)

State of Wisconsin )  
 ) ss.  
\_\_\_\_\_ County )

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

\_\_\_\_\_  
(Signature, Notary Public, State of Wisconsin)

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

\_\_\_\_\_  
(Date Commission Expires)

**Notary Seal**

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

\_\_\_\_\_  
(Signature of Attorney-in-Fact)

## NOTARY FOR SURETY

\_\_\_\_\_  
(Date)

State of Wisconsin )  
 ) ss.  
\_\_\_\_\_ County )

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

\_\_\_\_\_  
(Signature, Notary Public, State of Wisconsin)

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

\_\_\_\_\_  
(Date Commission Expires)

**Notary Seal**

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



# CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

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

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

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

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

\_\_\_\_\_  
(Signature of Authorized Contractor Representative)

\_\_\_\_\_  
(Date)



## March 2010

## LIST OF SUBCONTRACTORS

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

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

[illegible]

**DECEMBER 2000**

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

Instructions for Certification

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

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

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

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

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

## Special Provisions

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## **SPECIAL PROVISIONS**

### **1. General.**

Perform the work under this construction contract for Project 1000-04-70, Various Park & Rides, Various Locations, Non-Hwy, SE Region-Wide, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2017 Edition, as published by the department, and these special provisions.

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

100-005 (20160607)

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

The work under this contract shall consist of grading, storm sewer, base aggregate dense placement, asphaltic milling and relay, asphaltic pulverizing and relay, HMA pavement, concrete curb and gutter, concrete sidewalk, concrete pavement replacement, high friction surface treatment, pavement marking, signing, lighting, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

Park & Ride locations where work under this contract will occur are listed below:

#### Milwaukee County:

Lot 40-30 - IH 94 and Ryan Rd  
Lot 40-55 - IH 94 and S. 76th St (State Fair)  
Lot 40-70 - IH 41 and Good Hope Rd  
Lot 40-85 - IH 43 and Brown Deer Rd

#### Ozaukee County:

Lot 45-20 - IH 43 and CTH C (Pioneer Rd)  
Lot 45-60 - STH 32 and CTH LL

#### Washington County:

Lot 66-50 - IH 41 and CTH K

#### Waukesha County:

Lot 67-35 - IH 94 and Barker Rd  
Lot 67-40 - IH 94 and CTH F  
Lot 67-45 - IH 94 and CTH G  
Lot 67-75 - STH 16 and CTH P

### 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.

The completion date of all contract work is based on an expedited work schedule and may require extraordinary forces and equipment, including simultaneous work operations at geographically distant locations. Furthermore, various scheduling constraints, related to special events, staging, and transit, exist for the scattered 11 lot locations, and result in the interim completion dates described below.

**Interim Completion** – Lot 40-30 – IH 94 and Ryan Road. (Ryan Road Park & Ride):

Complete all construction operations on Lot 40-30 – IH 94 and Ryan Road (Ryan Road Park & Ride) prior to 12:01 AM June 22, 2017.

If the contractor fails to complete all contract work at the Ryan Road Park & Ride, prior to 12:01 AM on June 22, 2017, the department will assess the contractor \$805.00 for damages in interim liquidated damages for each calendar day that the facility remains incomplete after 12:01 AM on June 22, 2017. An entire calendar day will be charged for any period of time within a calendar day that the facility remains incomplete beyond 12:01 AM.

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

**Interim Completion** – Lot 40-55 – IH 94 and S. 76<sup>th</sup> St. (State Fair Park & Ride):

Complete all construction operations on Lot 40-55 – IH 94 and S. 76<sup>th</sup> St. (State Fair Park & Ride) prior to 12:01 AM June 22, 2017. Do not reopen until completing all contract work for the State Fair Park & Ride.

If the contractor fails to complete all contract work at the State Fair Park & Ride, prior to 12:01 AM on June 22, 2017, the department will assess the contractor \$835.00 for damages in interim liquidated damages for each calendar day that the facility remains closed after 12:01 AM on June 22, 2017. An entire calendar day will be charged for any period of time within a calendar day that the facility remains closed beyond 12:01 AM.

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

**Interim Completion** – Lot 40-85 – IH 43 and Brown Deer Road. (Brown Deer Road East Park & Ride):

Complete all construction operations on Lot 40-85 – IH 43 and Brown Deer Road (Brown Deer Road East Park & Ride) prior to 12:01 AM June 22, 2017.

If the contractor fails to complete all contract work at the Brown Deer Road East Park & Ride, prior to 12:01 AM on June 22, 2017, the department will assess the contractor \$805.00 for damages in interim liquidated damages for each calendar day that the facility remains incomplete after 12:01 AM on June 22, 2017. An entire calendar day will be charged for any period of time within a calendar day that the facility remains incomplete beyond 12:01 AM.

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

**Interim Completion** – Lot 67-40 – IH 94 and CTH F. (Lot 67-40):

Complete all construction operations on Lot 67-40 – IH 94 and CTH F (Lot 67-40) prior to 12:01 AM June 22, 2017.

If the contractor fails to complete all contract work at Lot 67-40, prior to 12:01 AM on June 22, 2017, the department will assess the contractor \$805.00 for damages in interim liquidated damages for each calendar day that the facility remains incomplete after 12:01 AM on June 22, 2017. An entire calendar day will be charged for any period of time within a calendar day that the facility remains closed beyond 12:01 AM.

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

**Interim Completion** – Lot 67-45 – IH 94 and CTH G / CTH DR. (Meadowbrook Park & Ride):

Complete all construction operations on Lot 67-45 – IH 94 and CTH G / CTH DR. (Meadowbrook Park & Ride) prior to 12:01 AM June 22, 2017.

If the contractor fails to complete all contract work at the Meadowbrook Park & Ride, prior to 12:01 AM on June 22, 2017, the department will assess the contractor \$805.00 for damages in interim liquidated damages for each calendar day that the facility remains incomplete after 12:01 AM on June 22, 2017. An entire calendar day will be charged for any period of time within a calendar day that the facility remains incomplete beyond 12:01 AM.

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

**General:**

The contractor is advised that there may be multiple mobilizations for such items as traffic control, concrete items, HMA paving, pavement marking, erosion control, lighting, signing,

seeding/sodding, erosion mat, fertilizer, temporary seeding, drainage items, and other incidental items necessary to complete the work under this contract. Concurrent operations may require simultaneous mobilizations to multiple geographically distant sites. No additional payment will be made by the department for said mobilizations.

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.

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.

**Supplement 108.4.1(1) with the following:**

Develop and update the CPM Progress Schedule to meet the contract-required interim completion dates and the completion date, taking into consideration all special events and sports event schedules affecting each lot, holidays, all transit schedules, alternate lots, utility work, and interrelated or simultaneous construction under this contract at other lots. Provide and discuss the CPM Progress Schedule at the Preconstruction Meeting and update as needed during construction or upon request by the engineer.

**Scheduling constraints:**

Milwaukee County:

- Lot 40-30 - IH 94 and Ryan Rd  
Coordinate with transit services as per the Traffic article of these special provisions.

Complete and re-open Lot 40-30 to the public's unimpeded use prior to Summerfest. See the Interim Completion Date for Lot 40-30 (Ryan Road Park & Ride).

No contract work shall be performed and all construction equipment shall be removed from the lot during the following event:

- Summerfest, June 28, 2017 through July 9, 2017.
- Lot 40-55 - IH 94 and S. 76th St (State Fair)  
Coordinate with transit services as per the Traffic article of these special provisions.

Complete and re-open Lot 40-55 to the public's unimpeded use prior to Summerfest. See the Interim Completion Date for Lot 40-55 (State Fair Park & Ride).

No contract work shall be performed and all construction equipment shall be removed from the lot during the following events:

- Summerfest, June 28, 2017 through July 9, 2017
- Italian Fest, July 21, 2017 through July 23, 2017
- German Fest, July 28, 2017 through July 30, 2017
- Wisconsin State Fair, August 3, 2017 through August 13, 2017
- Irish Fest, August 17, 2017 through August 20, 2017

- Lot 40-70 - IH 41 and Good Hope Rd  
Coordinate with transit services as per the Traffic article of these special provisions.
- Lot 40-85 - IH 43 and Brown Deer Rd  
Coordinate with transit services as per the Traffic article of these special provisions.

Complete and re-open Lot 40-85 to the public's unimpeded use prior to Summerfest. See the Interim Completion Date for Lot 40-85 (Brown Deer Road East Park & Ride).

No contract work shall be performed and all construction equipment shall be removed from the lot during the following events:

- Summerfest, June 28, 2017 through July 9, 2017
- Italian Fest, July 21, 2017 through July 23, 2017
- German Fest, July 28, 2017 through July 30, 2017
- Wisconsin State Fair, August 3, 2017 through August 13, 2017
- Irish Fest, August 17, 2017 through August 20, 2017

Ozaukee County:

Do not build Lots 45-20 and 45-60 at the same time.

- Lot 45-20 - IH 43 and CTH C (Pioneer Rd)  
Coordinate with transit services as per the Traffic article of these special provisions.

Lot 45-20 shall remain open to the unimpeded use of transit and the public during construction of Lot 45-60 at STH 32 and CTH LL in Port Washington.

- Lot 45-60 - STH 32 and CTH LL  
Coordinate with transit services as per the Traffic article of these Special Provisions.

Lot 45-60 shall remain open to the unimpeded use of transit and the public during construction of Lot 45-20 at IH 43 and CTH C (Pioneer Road).

No contract work at Lot 45-60 shall be performed and all construction equipment shall be removed from the lot during the following events:

- Summerfest, June 28, 2017 through July 9, 2017
- Allen Edmonds Tent Sale, June 11, 2017 through June 24, 2017
- Port Fish Day, July 15, 2017
- School Term: Lot 45-60 shall remain open during the school term of St. John XXIII Catholic School in Port Washington (formerly known as Port Washington Catholic School/ St. Peter's). The fall 2016 term begins August 29, 2016. The spring 2017 term ends June 2, 2017. The start date of the fall 2017 term was not published as of the time of this writing. It is the contactor's responsibility to verify the beginning and ending dates of the St. John XXIII 2017 school terms.

Information only: Allen-Edmonds employees will use the school/church parking lot during the Lot 45-60 closure, per coordination by church and manufacturer.

Washington County:

- Lot 66-50 - IH 41 and CTH K  
No restrictions.

Waukesha County:

- Lot 67-35 - IH 94 and Barker Rd (Goerkes Corners)  
Park & Ride Lot 67-35 (Goerkes Corners) is a transit hub and includes special arrivals and departures by various transit providers day and night seven days a week. The lot will remain open for transit services with reduced parking capacity. Coordinate with transit services as per the Traffic article of these special provisions.

No contract work shall be performed and all construction equipment shall be removed from the lot during the following events:

- Summerfest, June 28, 2017 through July 9, 2017
- Wisconsin State Fair, August 3, 2017 through August 13, 2017

Information only: Goerkes Corners is used by Milwaukee Brewers home game attendees for parking and transit. Milwaukee Brewers home and away game schedules for 2017 were unavailable at the time of this writing. Construction stages with higher impact to parking capacity should be scheduled during “Brewers Road Trip” away games. It is the contractor’s responsibility to check the Brewer schedules.

- Lot 67-40 - IH 94 and CTH F  
Ensure that the requirements of the Archaeology special provision are met before performing work. No transit or special event restrictions.

Complete all contract work, remove all construction equipment, and re-open Lot 67-40 prior to expiration of the burial authorization described in the Archaeology special provision. See the Interim Completion Date for Lot 67-40 Park & Ride.

- Lot 67-45 - IH 94 and CTH G  
Coordinate with transit services as per the Traffic article of these special provisions. Complete and re-open Lot 67-45 to the public’s unimpeded use prior to Summerfest. See the Interim Completion Date for Lot 67-45 (Meadowbrook Park & Ride).

No contract work shall be performed and all construction equipment shall be removed from the lot during the following events:

- Summerfest, June 28, 2017 through July 9, 2017
- Wisconsin State Fair, August 3, 2017 through August 13, 2017

- Lot 67-75 - STH 16 & CTH P  
Coordinate with transit services as per the Traffic article of these special provisions.

## **4. Traffic.**

### **General**

The construction sequences and the associated traffic control will be accomplished as detailed on the plans and as described herein.

The project consists of 11 separate sites in 3 counties. Refer to the Staging Summary by Lot Location sub article within this Traffic article, as well as the Prosecution and Progress article. Some of the work will be performed under full lot closures, and some will be performed with the lot partially open.

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

### **Supplement 107.9 (2) with the following:**

Do not park or store equipment, vehicles, or construction materials within 35 feet of any travel lane on freeways, nor within 18 feet of any non-freeway State or County highway carrying traffic, during non-working hours and nighttime hours except at locations and times approved by the engineer.

For the Park & Ride Lots, coordinate with the engineer and the lot owners for any storage and staging of equipment or materials. Department-owned lots include Lot 40-30 and 40-70 in Milwaukee County, 66-50 in Washington County, and 67-35, 67-40, and 67-45, and 67-75 in Waukesha County. The Wisconsin State Fair Park Board owns Lot 40-55 in Milwaukee County. Lot 40-85 in Milwaukee County includes both county-owned and department-owned portions. Ozaukee County owns Lots 45-20 and 45-60.

### **Supplement 643.3.1 with the following:**

Deploy a Traffic Control Portable Changeable Message Sign (PCMS) at least 14 calendar days prior to start of construction at each Park & Ride. The messages and locations of the PCMS shall be determined by the engineer, and may require multiple changes to the message at the same location depending on staging and closures. At Lots 40-30, 40-85, 45-20, 45-50, 67-35, 67-40, and 67-45, continue deployment of the PCMS throughout the duration of construction, and include PCMS in notifications to lot users of upcoming stage closures within the lot.

Have available at all times sufficient experienced personnel, tools, and equipment required for prompt installation, removal, maintenance, and reinstallation of the required traffic control devices to route traffic in order to perform the operations.

All contractor vehicles and equipment shall be equipped with and have yellow flashing lights operating.

Designate and individual responsible for traffic control maintenance including access of local traffic, and 24-hour emergency traffic control repair. Provide the name and telephone number of this individual to the engineer at the preconstruction meeting.

Conduct construction operations in a manner that will minimize interference to traffic movements and adjacent businesses and residential access near the construction area.

Fill drop-offs as described below and anticipated to exist for more than three continuous days and nights that have a continuous length of 25 feet or more with aggregates or other engineer-approved temporary fill material to provide a minimum 3:1 slope.

1. Drop-offs greater than 6 inches but less than 12 inches if within 2 feet of the travel lane.
2. Drop-offs greater than 12 inches but less than 24 inches if within 4 feet of the travel lane.

Use lane closures and flaggers at driveway aprons for construction activities including but not limited to concrete placement.

#### **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 $\leq 16'$ )	MINIMUM NOTIFICATION
Lane and shoulder closures	14 calendar days
Full roadway closures	14 calendar days
System and service ramp closures	14 calendar days
Full system and service ramp closures	14 calendar days
Detours	14 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 (20150630)

**Staging Summary by Park & Ride Lot Location.**

**Lot 40-55 at IH 94 and 76th St. (Milwaukee Co) – State Fair Park & Ride:**

Construction to occur in one stage with the lot closed. Work includes pulverizing & relaying existing asphaltic surface, paving with 4" HMA pavement, reconstructing inlets, minor curb & gutter repairs, lighting, signing, and pavement marking.

The adjacent parking lot to the west will remain open for parking during construction, and transit will be moved to a temporary bus stop on the southwest corner of Main St. /Adler St. and S. 76th Street instead of the current bus stop on Kearney Street. Riders will park in the adjacent lot and cross an existing crosswalk to get to a temporary walkway on Adler Street marked with barricades and safety fence, leading to the temporary bus stop.

Use PCMS before construction, traffic control devices as the plans show, and coordination with engineer and transit providers to guide riders to the temporary parking area and the temporary bus stop.

Transit providers:

MCTS (Milwaukee County Transit System), Melanie Flynn, (414) 343-1764.

Badger Bus, Doug Fosnow, (608) 698-9290.

UWM Transit Services (U-Bus), (414) 229-4000

**Lot 40-70 at IH 41 and W. Good Hope Rd. (Milwaukee Co):**

Construction to occur in one stage with the lot closed. Work includes concrete sidewalk replacement at the bus stop island, 2" HMA pavement overlay, lighting, signing, and pavement marking.

Use PCMS before construction and coordinate with engineer and transit provider to inform riders to use alternate lot 67-85 at IH 41 and Pilgrim Road, located 4 miles to the north.

Transit provider:

MCTS (Milwaukee County Transit System), Melanie Flynn, (414) 343-1764.

**Lot 45-20 at IH 43 & CTH C (Ozaukee Co):**

Construction to occur in one stage with the lot closed to the public. Work includes limited grading, concrete bus stop area and bus pad, 2" HMA pavement overlay, signing, and pavement marking.

Coordinate with We Energies as per the Utilities Article of these special provisions, for installation of We Energies-owned light poles for Ozaukee County. Also allow any utility company to cross the jobsite at any time, to access the existing cell tower and hub located north of the lot, as needed.

Use PCMS before construction and coordinate with engineer and transit providers to inform riders to use as an alternate lot at the Grafton Commons shopping center, located 3 miles north near IH-43 and STH 60, where the same transit services have an existing stop. Do not close any other park & ride lot in Ozaukee County when Lot 45-20 is closed.

Transit providers:

Ozaukee County Express, Jason Wittek, (262) 284-8108

MCTS (Milwaukee County Transit System), Melanie Flynn, (414) 343-1764

Badger Bus, Doug Fosnow, (608) 698-9290.

Other Contacts:

Jon Edgren, Ozaukee County Director of Public Works, (262) 238-8335

**Lot 45-60 at STH 32 and CTH LL (Ozaukee Co):**

Construction to occur in one stage with the lot closed to the public. Work includes pulverizing and relaying existing asphaltic surface, concrete sidewalk, concrete bus stop area and bus pad, concrete driveway aprons, 3 ½" HMA pavement overlay, signing, and pavement marking.

Use PCMS before construction and coordinate with engineer and transit providers to inform riders to use as an alternate lot the Saukville Wal-Mart, located 4.5 miles south, near IH-43 and STH 33, where the same transit services have an existing stop. Do not close any other park & ride lot in Ozaukee County when Lot 45-60 is closed.

Transit providers:

Ozaukee County Express, Jason Wittek, (262) 284-8108

MCTS (Milwaukee County Transit System), Melanie Flynn, (414) 343-1764.

Badger Bus, Doug Fosnow, (608) 698-9290.

Other Contacts:

Jon Edgren, Ozaukee County Director of Public Works, (262) 238-8335

Randy Tetzlaff, City of Port Washington, (262) 284-2600

**Lot 66-50 at IH 41 and CTH K (Washington Co):**

Construction to occur in one stage with the lot closed. Work includes grading, base aggregate dense, concrete culvert pipes, concrete bus stop area and bus pad, paving with 3" – 5" HMA pavement, lighting, signing, and pavement marking.

Use PCMS before construction and coordinate with engineer to notify lot users of the pending closure. This lot does not have transit services. No alternate lot is designated by this project.

**Lot 40-30 at IH 94 & STH 100 Ryan Road (Milwaukee Co):**

Construction to occur in four stages while the lot is open but with reduced capacity. Work items include pavement marking and signing. Each of the first three stages will have about one-third of the parking stalls blocked off by drums and barricades. The fourth stage will take place in the main travel (bus stop) area under flagging operations.

Conduct stage four between the hours of 8:30 AM and 4:00 PM, and temporarily move handicap parking as the plans show and as directed by the engineer. Flaggers shall direct all pedestrian and vehicular traffic in the Stage 4 work zone.

Use PCMS and coordinate with engineer and transit providers to verify bus schedules and inform lot users of the closures and the need to vacate portions of the lot during the work. Use traffic control devices to reserve parking stalls required for work items taking place when the lot is open. No alternate lot exists.

Transit provider:

MCTS (Milwaukee County Transit System), Melanie Flynn, (414) 343-1764

Bus Schedule (Subject to change):

Monday-Friday, 5:45 AM to 8:00 AM, 4:15 PM, to 7:00 PM

**Lot 40-85 at IH 43 & Brown Deer Rd STH 100 (Milwaukee Co):**

Construction to occur in four stages while the lot is open but with reduced capacity. Work items include pavement marking and signing. Each of the first three stages will have about one-third of the parking stalls blocked off by drums and barricades. The fourth stage will take place in the main travel (bus stop) area under flagging operations.

Temporarily move handicap parking in Stage 4 as the plans show and as directed by the engineer. Flaggers shall direct all pedestrian and vehicular traffic in the Stage 4 work zone, including transit.

Use PCMS and coordinate with engineer and transit providers to verify bus schedules and inform lot users of the closures and the need to vacate the lot during the work. Use traffic control devices to reserve parking stalls required for work items taking place when the lot is open. No alternate lot exists.

Transit providers:

MCTS (Milwaukee County Transit System), Melanie Flynn, (414) 343-1764.

Bus Schedule (Subject to change):

Monday-Thursday, 6:15AM to 10:30 PM, Friday 5:45 AM to 6:30 PM

**Lot 67-35 at IH 94 & Barker Rd – Goerkes Corners (Waukesha Co):**

Construction to occur in six stages, and the lot will remain open to transit services and traffic but with reduced capacity. Lot 67-35 is a transportation hub with severe schedule constraints and no alternate lot is available. Use PCMS prior to and throughout the duration of work. Coordinate with engineer and transit providers to verify bus schedules, agree on times for construction stage closures, and inform lot users of the pending areas to close and the need to vacate those areas. Use traffic control devices to reserve parking stalls in areas to close.

**Stage 1:** Replace concrete pavement and perform signal work in the right exit driveway, repair HMA pavement the existing handicap parking area, perform various other repairs, place high friction surface treatment on the new concrete pavement, and apply pavement marking to the south and west part of the lot.

Establish closure area and temporary handicap parking and as the plans show and as directed by the engineer. Notify the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to starting work in the exit driveway, to disconnect the RT turn loop detector and adjust signal timing.

Cars will use the bus area to reach the exit driveway. Buses will follow the existing park & ride configuration. A left-only condition will be present for traffic exiting on to Barker Road, and this traffic can reverse direction on Barker using surface streets or a U-turn.

**Stage 2:** Replace concrete pavement, perform signal work, and apply high friction surface treatment in the left exit driveway. Traffic patterns for buses and cars will follow the existing configuration of the park & ride with the exception of the right-only condition exiting onto Barker Road. This traffic can reverse direction on Barker using surface streets or a U-turn.

**Stage 3:** Repair curb and gutter, sidewalk, and pavement in the bus stop area. The bus stop area will close for these repairs, and traffic will circulate around the outside of the bus stop island.

Establish closure areas, temporary bus stop, temporary handicap parking, and closure areas as the plans show and as directed by the engineer.

**Stages 4-6:** Restripe the remainder of the lot in stages 4-6. Each stage will have about one-third of the remaining stalls blocked off by drums and barricades. Establish closure areas as the plans show and as directed by the engineer.

**Transit providers:**

Badger Bus, Doug Fosnow, (608) 698-9290

Wisconsin Coach Lines, Ron Hansen, (262) 542-8664

Waukesha Metro, Brian Engelking, (262) 524-3634

Greyhound, [isfr@greyhound.com](mailto:isfr@greyhound.com)

Lamers Bus Lines, (414) 282-3566

Other Contact:

Dave Heil, Waukesha County DPW, (262) 424-9004

Bus Schedules: Buses serve this lot nearly non-stop seven days/week. Waukesha Metro finishes by 10:00 PM M-S and 6:00 PM Sun. Badger finishes by 9:30 PM. Coach USA/Wisconsin Coach Airport Flyer runs begin at 3:15 AM and end at 12:30 AM.

**Lot 67-40 at IH 94 & CTH F (Waukesha Co):**

Construction to occur in two stages. During stage 1 the east half of the aisle will be blocked off while the fence is being replaced. Parking stalls are along the west side of the lot and will remain open. During stage 2 the entire lot will closed down for pavement marking. Other work items include permanent signing which may take place during both stages.

Use PCMS and coordinate with engineer to inform lot users of the closures and the need to vacate the lot during the work. Use traffic control devices to reserve parking stalls required for work items taking place when the lot is open. No alternate lot exists. There are no existing transit services at this Park & Ride Lot.

Contact:

Dave Heil, Waukesha County DPW, (262) 424-9004

**Lot 67-45 at IH 94 & CTH G (Waukesha Co):**

Construction to occur in three stages while the lot is open but with reduced capacity. Work items include pavement marking and signing. Each of the first two stages will have about one-half of the parking stalls blocked off by drums and barricades. The third stage will take place in the main travel (bus stop) area under flagging operations.

Conduct stage four between the hours of 8:30 AM and 4:30 PM, and temporarily move handicap parking as the plans show and as directed by the engineer. Flaggers shall direct all pedestrian and vehicular traffic in the Stage 3 work zone.

Use PCMS and coordinate with engineer and transit providers to verify bus schedules and inform lot users of the closures and the need to vacate portions of the lot during the work. Use traffic control devices to reserve parking stalls required for work items taking place when the lot is open. No alternate lot exists.

Transit providers:

Wisconsin Coach Lines, Ron Hansen, (262) 542-8664

Bus Schedule (Subject to change):

Monday-Friday, 6:00 AM to 8:15 AM, 4:45 PM to 7:30 PM

Other Contact:

Dave Heil, Waukesha County DPW, (262) 424-9004

**Lot 67-75 at STH 16 & CTH P (Waukesha Co):**

Construction to occur in two stages and will remain open to traffic during the first stage of construction and closed for the second stage.

Stage 1: Move the bus pickup as described herein and as the plans show to a temporary bus stop area in the stalls in the southwest corner of the lot, where there will be no parking during this stage, which includes concrete work in the bus stop area and installing signing.

Stage 2: Work to take place under a short-term closure during a time when transit is not in service, for pavement marking.

Use PCMS and coordinate with engineer and transit providers to verify bus schedules and inform lot users of the closures and the need to vacate the lot during the work. Use traffic control devices to reserve parking stalls required for work items taking place when the lot is open. No alternate lot exists.

Transit provider:

Wisconsin Coach Lines, Ron Hansen, (262) 542-8664.

Bus Schedule (Subject to change):

One Bus: Monday-Friday, 6:00 AM departure, 6:00 PM arrival.

Other Contact:

Dave Heil, Waukesha County DPW, (262) 424-9004

## **5. Timely Decision Making Manual.**

Use the Timely Decision Making Manual (TDM) on this contract. Coordinate with the department to modify the various published tools as necessary to meet the particular project needs and determine how to implement those tools under the contract. Ensure the full participation of the contractor and its principal subcontractors throughout the term of the contract.

Forms and associated guidance are published in the TDM available at the department's Highway Construction Contract Information (HCCI) web site at:

Timely Decision Making Manual (TDM)

105-005 (20151210)

## **6. 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.

At Lot 40-55, IH 94 & 76<sup>th</sup> Street (State Fair)

Do not operate motorized construction equipment from 9:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer. Prior to waiving the noise compliance by the engineer, provide 48 hour advance notice to Mr. Peter Daniels, City of West Allis Engineer, at (414) 302-8374 regarding the evening noise generating construction operation.

107-001 (20060512)

## **7. Coordination with Businesses and Residents.**

The department will 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)

Work under this contract is at 11 separate locations in four counties. Starting work at a new/different location shall be considered a staging change and will require coordination with businesses and residents, unless the meeting is waived in writing by the engineer.

## **8. Holiday Work Restrictions.**

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying IH 41, IH 43, IH 94, USH 18, STH 16, STH 32, or STH 100 traffic, and entirely clear the traveled way and shoulders of such portions of said highways 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, May 30, 2017 for Memorial Day;
- From noon Friday, June 30, 2017 to 6:00 AM Wednesday, July 5, 2017 for Independence Day;
- From noon Friday, September 1 to 6:00 AM Tuesday, September 5, 2017 for Labor Day.

107-005 (20050502)

Holiday Work Restrictions may be lifted for work occurring within a park & ride lot and not involving the use of the aforementioned Interstate, US, or State highways, if approved in writing by the engineer, in order to accomplish the work with minimum disruption to transit schedules at the following location:

Lot 67-35 – IH 94 & Barker Road (Goerkes Corners) (Memorial Day)

**Special Events:** In addition to holidays, special events including but not limited to the Wisconsin State Fair, Summerfest, Port Fish Day, and ethnic festivals will affect construction schedules for each of the 11 lots. Each location will have its own set of constraints. Refer to the Prosecution & Progress article.

## 9. Other Contracts.

The following project (s) may be in construction currently with the work under this contract. Coordinate activities, detours, work zone traffic control, roadway and lane closures, and other work items as required with other contracts.

**Project 1060-12-71**, IH 94, West Waukesha County Line to STH 16, under a department contract. Work under this contract is anticipated to occur during fall 2017 and the 2018 construction season. Work areas under contract 1060-12-71 are near Lot 67-45 – IH-94 and CTH G of this contract. Coordinate work at Lot 67-45 with the 1060-12-71 contractor if work is concurrent.

Additional projects may be under construction concurrently with the work items under the 1000-04-70 Various Park & Rides contract. Inquire with the department for any additional projects anticipated to be under construction in the project area or along proposed haul roads.

## 10. Railroad Insurance and Coordination.

### A Description

Comply with standard spec 107.17 for all work affecting Union Pacific Railroad Company property and any existing tracks.

### A.1 Railroad Insurance Requirements

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

Notify evidence of the required coverage, and duration to John Venice, Manager Special Projects – Industry & Public Projects Engineering Department at 101 North Wacker Drive - Suite 1920, Chicago, IL 60606, TELEPHONE (312) 777-2043, FAX (402) 233-2769, email [jnvenice@up.com](mailto:jnvenice@up.com). Include the following information on the insurance document:

Project: 1000-04-70

Route Name: Park and Ride Lot #45-20 (IH-43 & CTH C)

Crossing ID: 180 116V

Railroad Subdivision: Shoreline Subdivision

Railroad Milepost: 114.90

### **A.2 Work by Railroad**

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

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

Contact John Venice, Manager Special Projects – Industry & Public Projects Engineering Department, 101 North Wacker Drive – Suite 1920, Chicago, IL 60606, TELEPHONE (312) 777-2043, FAX (402) 233-2769, email [jnvenice@up.com](mailto:jnvenice@up.com), for consultation on railroad requirements during construction.

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

### **A.4 Temporary Grade Crossing**

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

### **A.5 Train Operation**

Approximately six through freight trains operate daily through the construction site. Through freight trains operate at up to 30 mph.  
107-026 (20130615)

## **11. Utilities.**

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

Additional detailed information regarding the location of relocated utility facilities is available on the permits issued to the utility companies. These permits can be viewed at the Region Office during normal working hours. Contact the SE Region Utility Construction Engineer, Craig Hardy, at (414) 750-1469.

There are underground and overhead utility facilities located within the project limits. There are known utility adjustments required for this construction project. The contractor shall coordinate his construction activities with a call to Digger's Hotline or a direct call to the utilities that have facilities in the area as required per statutes. The contractor shall use caution to ensure the integrity of underground and overhead facilities.

Bidders are advised to contact each utility company listed in the plans prior to preparing their bids, to obtain current information on the status of any utility within the project work limits.

The following utility owners have facilities within the project area:

**AT&T Wisconsin.** AT&T Wisconsin has facilities within the project limits. AT&T Wisconsin has reviewed the proposed plan and concluded the following:

Lot #40-30 (IH 94 and Ryan Rd) – Facilities along the north side of Ryan Road adjacent to the project limits. No conflicts anticipated with proposed work.

Lot #40-55 (IH 94 and S. 76<sup>th</sup> Street) – Buried facilities in the southeast corner of the lot. No conflicts anticipated with proposed work.

Lot #40-70 (USH 41 and Good Hope Rd) – Facilities along 115<sup>th</sup> Street adjacent to the project limits. No conflicts anticipated with proposed work.

Lot #40-85 (IH 43 and Brown Deer Rd) – Facilities along the north side of the lot. No conflicts anticipated with proposed work.

Lot #45-20 (IH 43 and CTH C) - No conflicts anticipated with buried facility across the entrance to the parking lot as well as along the entire east side of the parking lot. No conflict with the existing pedestal and (2) 8 in bollards on the west side of the driveway is at the limits of the gravel shoulder. Bollards to remain in limits of gravel shoulder to protect pedestal from driveway traffic.

Lot #45-60 (STH 32 and CTH LL) - No conflicts anticipated with buried facility along the south side of the parking lot between the lot and the road. AT&T will remove the existing pedestal at Station 33 + 28, 56' RT and bury a splice in this location. Work to be completed prior to construction.

Lot #66-50 (USH 41 and CTH K) - No facilities.

Lot #67-35 (IH 94 and Barker Rd) – Buried facilities within vicinity of parking lot. No conflicts anticipated with miscellaneous curb removal and replacement, apron end wall removal and replacement, new curb installation, gravel shoulder work or parking lot exit pavement removal and replacement.

Lot #67-40 (IH 94 and CTH F) – Buried facilities within vicinity of parking lot. No conflicts anticipated with proposed plans.

Lot #67-45 (IH 94 and CTH G) - Buried facilities within vicinity of parking lot. No conflicts anticipated with proposed work.

Lot #67-75 (STH 16 and CTH P) – Facilities along CTH P/Brown Street and CTH P/Wisconsin Avenue adjacent to the project limits. No conflicts anticipated with proposed work.

The AT&T field contact is Jeff Oldenburg at (414) 412-7047 for Lot 45-60 and Jay Bulanek at (414) 491-2855 for all other lots.

**ATC Management, Inc. – Electricity.** ATC Management, Inc. – Electricity has aerial transmission facilities along the east side of Lot #67-40 (IH 94 & CTH F). ATC Management, Inc. – Electricity has reviewed the proposed plan and concluded no conflicts are anticipated with the facilities.

The ATC Management, Inc. – Electricity field contact is Chris Dailey at (262) 506-6884.

**City of Milwaukee – Street Lighting.** City of Milwaukee–Street Lighting reviewed the proposed plan and has no facilities within the project limits.

The City of Milwaukee- Street Lighting field contact is Dennis Miller at (414) 708-4251.

**City of Milwaukee – Communications.** City of Milwaukee–Communications has facilities within the project limits. City of Milwaukee–Communications reviewed the proposed plan and concluded there no conflicts are anticipated with their existing facilities.

Milwaukee County:

- Lot #40-30 (IH 94 & Ryan Rd) – There are no anticipated conflicts.
- Lot #40-55 (IH 94 & S. 76<sup>th</sup> Street) – There are no anticipated conflicts.
- Lot #40-70 (USH 41 & Good Hope Rd) – There are no anticipated conflicts.
- Lot #40-85 (IH 43 & Brown Deer Rd) – There are no anticipated conflicts.

Ozaukee County:

- Lot #45-20 (IH 43 & CTH C) – There are no anticipated conflicts.
- Lot #45-60 (STH 32 & CTH LL) – There are no anticipated conflicts.

Washington County:

- Lot #66-50 (USH 41 & CTH K) – There are no anticipated conflicts.

Waukesha County:

- Lot #67-35 (IH 94 & Barker Rd) – There are no anticipated conflicts.
- Lot #67-40 (IH 94 & CTH F) – There are no anticipated conflicts.
- Lot #67-45 (IH 94 & CTH G) – There are no anticipated conflicts.
- Lot #67-75 (STH 16 & CTH P) – There are no anticipated conflicts.

The City of Milwaukee - Communications field contact is DPW/Infrastructure Communications-Dispatch and Bryan M. Pawlak at (414) 286-3686.

**City of Milwaukee – Conduit.** City of Milwaukee-Conduit has underground facilities on S. 76<sup>th</sup> Street at West Kearney Street and West Main Street which is adjacent to the project limits of Lot #40-55 (IH 94 and S. 76<sup>th</sup> Street). City of Milwaukee-Conduit has reviewed the proposed plan and concluded no conflicts are anticipated with the Underground Conduit facilities on S. 76<sup>th</sup> Street at West Kearney Street and West Main Street as part of work on Lot #40-55 (IH 94 and S. 76<sup>th</sup> Street).

The City of Milwaukee - Conduit field contact is Karen Rogne at (414) 286-3243.

**City of Milwaukee – Sewer.** City of Milwaukee – Sewer has reviewed the proposed plan and concluded that no conflicts are anticipated.

The City of Milwaukee – Sewer field contact is Tony Kotecki at (414) 708-3886.

**City of Milwaukee – Water.** City of Milwaukee – Water has reviewed the proposed plan and concluded that no conflicts are anticipated.

The City of Milwaukee – Water field contact is Dave Goldapp at (414) 708-2695.

**City of Milwaukee – Signals.** City of Milwaukee-Signals has signal facilities on S. 76<sup>th</sup> Street at West Kearney Street and West Main Street which is adjacent to the project limits of Lot #40-55 (IH 94 and S. 76<sup>th</sup> Street). City of Milwaukee-Signals has reviewed the proposed plan and concluded that no conflicts are anticipated with the signal facilities on S. 76<sup>th</sup> Street at West Kearney Street and West Main Street as part of work on Lot #40-55 (IH 94 and S. 76<sup>th</sup> Street).

The contractor will use caution when working near the existing signal service cable fed from WE WP#97-18178 located in the northeast corner of Lot 40-55 (State Fair Park and Ride).

The City of Milwaukee – Signals field contact is Al Nichols at (414) 708-5148.

**Frontier Communications.** Frontier Communications has underground facilities along the east side of Addison Road at Lot #66-50 (USH 41 and CTH K). Frontier Communications has reviewed the proposed plan and has concluded they do not anticipate any conflicts.

The Frontier Communications field contact is Russ Ryan at (920) 737-9662.

**McLeod USA Telecommunication Services Inc. - Communication Line.** McLeod USA Telecommunication Services Inc. (Windstream) - Communication Line has fiber optic cable supported on existing We Energies poles along the north side of Lot #45-60 (STH 32 and CTH LL). We Energies will relocate two of these poles prior to construction.

McLeod USA Telecommunication Services Inc. (Windstream) - Communication Line will relocate fiber optic cable to new We Energies poles and transfer its underground riser to the new pole. Work to be performed prior to construction, following We Energies placement of new pole and completion of We Energies work.

At Lot #66-50 (USH 41 and CTH K) McLeod USA Telecommunication Services Inc. (Windstream) – Communication Line has underground fiber optic facilities along CTH K. No conflicts are anticipated.

The McLeod USA Telecommunications field contact person is Aaron Grodi at (608) 770-1778.

**Milwaukee Metropolitan Sewerage District (MMSD).** There are Milwaukee Metropolitan Sewerage District (MMSD) has facilities at only one of the parking lot locations: Lot #40-30 (IH 94 and Ryan Rd).

The MMSD has an existing 84” diameter Metropolitan Interceptor Sewer (approximately 79 feet to top of pipe) and associated Manhole (M4516) located in the grassed area south of the parking lot and north of W Ryan Road. MMSD reviewed the proposed plan and concluded no conflicts anticipated with the existing facilities.

The MMSD field contact is Larry Anderson at (414) 617-1429.

**Time Warner Cable.** Time Warner Cable has aerial and underground facilities within the project limits. Time Warner Cable has reviewed the proposed plan and concluded no conflicts are anticipated with their existing facilities within and adjacent to the following lots:

Milwaukee County:

- Lot #40-30 (IH 94 and Ryan Rd) – No facilities within the project limits.
- Lot #40-55 (IH 94 and S. 76<sup>th</sup> Street) – Aerial facilities at the northeast corner, and underground along the east and south edges of lot.
- Lot #40-70 (USH 41 and Good Hope Rd) - Aerial and underground facilities along 115th Street.
- Lot #40-85 (IH 43 and Brown Deer Rd) - Aerial facilities near east side of lot.

Ozaukee County:

- Lot #45-20 (IH 43 and CTH C) - Aerial facilities to the west of the project limits. Underground facilities along the south, east, and north sides of the project limits.
- Lot #45-60 (STH 32 and CTH LL) - Aerial facilities to the east of the project limits.

Washington County:

- Lot #66-50 (USH 41 and CTH K) – No facilities.

Waukesha County:

- Lot #67-35 (IH 94 and Barker Rd) – Aerial facilities at northeast corner of project limits.
- Lot #67-40 (IH 94 and CTH F) – Aerial facilities along east project limits, underground along south and north project limits.
- Lot #67-45 (IH 94 and CTH G) – Underground facilities north of project limits.
- Lot #67-75 (STH 16 and CTH P) – Aerial facilities to the west of the project limits.

Contractor shall notify Time Warner Cable should subsurface conditions require extra EBS work near Time Warner Cable facilities.

The Time Warner Cable field contact is Steve Cramer at (414) 688-2385.

**Village of River Hills (Sewer & Water).** Village of River Hills has underground facilities running north/south along the west side of Lot #40-85 (IH 43 and Brown Deer Rd). Village of River Hills has reviewed the proposed plan and concluded no conflicts are anticipated with the existing facilities.

The Village of River Hills field contact is Kurt Frederickson at (414) 651-8586.

**We Energies – Electric.** We Energies – Electric has underground and aerial facilities within the project limits. We Energies – Electric has reviewed the proposed plan and concluded the following:

Lot #40-30 (IH 94 and Ryan Rd) has facilities along Ryan Road along the south side of the lot. There are no known electric conflicts at this location. No relocation is planned.

Lot #40-55 (IH 94 and S. 76<sup>th</sup> Street) has buried facilities along the north side of the lot. A pole, guy wires and overhead facilities are located at the northeast corner of the lot. There are no known electric conflicts at this location. No relocation is planned.

Lot #40-70 (USH 41 and Good Hope Rd) has facilities along 115<sup>th</sup> Street. There are no known electric conflicts at this location. No relocation is planned.

Lot #40-85 (IH 43 and Brown Deer Rd) - There are no known electric conflicts at this location. No relocation is planned.

Lot #45-20 (IH 43 and CTH C) has facilities within the lot. The resolution of facility conflicts is as follows:

Area light pole at Station 30+94, 78' LT to be removed prior to construction.

Area light pole at Station 31+48, 167' LT to be removed prior to construction.

Area light pole at Station 32+43, 105' LT to be removed prior to construction.

We Energies - Electric to design and build a new lighting layout for Ozaukee County at Lot 45-20. One pole proposed to be placed at Station 30+92, 106' LT, outside of paved area. There are 2 poles proposed to be placed within the paved area, one at approximately Station 32+13, 99 LT, and one at approximately Station 33+33. 96LT.

For pole placement within the proposed paved area, contractor shall provide We Energies 3 weeks' prior notification of the paving date, to coordinate and schedule these pole installations after grading and prior to paving. Provide 1 work day, during which time the area shall be free of other work operations, for We Energies crews to set the poles within the paved area. We Energies job owner for contractor coordination of Lot 45-20 pole placement is:

Cindy Glander, (262) 268-3652  
[cindy.glander@we-energies.com](mailto:cindy.glander@we-energies.com)

Lot #45-60 (STH 32 and CTH LL) has facilities within the lot. The resolution of facility conflicts is as follows:

- Pole at Station 31+95, 35' LT to be removed, new pole to be installed at Station 31+95, 56' LT.
- Pole at Station 34+14, 25' LT to be removed, new pole to be installed at Station 31+95, 67' LT.
- Anchor at 34+44, 20'LT to be removed.
- Area light pole at 35+24, 87' RT to be relocated to 35+34, 87' RT.
- We Energies to design and build a new parking lot lighting layout for Ozaukee County at Lot 45-60. All lighting relocation work will be completed prior to construction.

Lot #66-50 (USH 41 and CTH K) has facilities along CTH K within the project limits. There are no known conflicts at this location. No relocation is planned. WisDOT to apply for new electric service at this location 8-12 weeks prior to lighting installation at lot.

Lot #67-35 (IH 94 and Barker Rd) - There are no known electric conflicts at this location. No relocation is planned.

Lot #67-40 (IH 94 and CTH F) - There are no known electric conflicts at this location. No relocation is planned.

Lot #67-45 (IH 94 and CTH G) - There are no known electric conflicts at this location. No relocation is planned.

Lot #67-75 (STH 16 and CTH P) has a pole and guy wire north of the bus stop area. There are no known electric conflicts at this location. No relocation is planned.

The We Energies (Electric) field contact person is Al Schmitt at (414) 322-1824.

It is imperative that the highway contractor contact We Energies before removing any gas facilities or electrical underground cables, to verify that they have been discontinued and carry no natural gas or electrical current. The contractor must not assume that unmarked facilities have been discontinued. At no time is it acceptable to push, pull, cut, or drill an unmarked facility without explicit consent from We Energies. Contractor must call We Energies 24 hour Dispatch lines to arrange verification.

We Energies Electric Dispatch: (800) 662-4797

We Energies Gas Dispatch: (800) 261-5325

**We Energies - Gas.** We Energies – Gas has facilities within the project limits at Lot #40-55 (IH 94 and S. 76<sup>th</sup> Street). We Energies – Gas has reviewed the proposed plan and concluded the following:

We Energies - Gas has an 8-inch gas main and a 16-inch steel high pressure gas main along the north side of Lot 40-55. These facilities are flagged as ‘high profile’ in the digger’s Hotline system and will automatically result in a ticket requiring coordination with a watchdog when working nearby.

We Energies - Gas does not anticipate any conflicts with the proposed work. Contractor shall not perform work near any high pressure facility and/or any gas facility 8” in diameter or larger without a watchdog present. For safety purposes, do not disturb, bury, or park any materials/equipment above any valves or test stands.

The We Energies - Gas field contact person is Nick Ernster at (414) 640-4271

The following utility owners have work facilities within the project area; however, no adjustments are anticipated:

**WisDOT Communications (FTMS).** WisDOT Communications (FTMS) has underground facilities within the project limits at Lot #40-30 (IH 94 and Ryan Rd) and Lot #40-70 (USH 41 and Good Hope Rd).

WisDOT Communications (FTMS) has reviewed the proposed plan and concluded the following:

At Lot #40-30 (IH 94 and Ryan Rd) no conflicts are anticipated. The underground facilities are located west of the entrance and continue to the west along Ryan Rd. Underground facilities begin at the bus/car pool IH 94 entrance ramp and continue along the northeast edge of the lot.

At Lot #40-70 (USH 41 and Good Hope Rd) underground facilities are located in the bus stop island. Facilities continue to the southwest, northwest and north east from the bus stop island. The facilities at this lot are no longer in use. The conduits under the Good Hope Rd park and ride bus stop sidewalk are empty. The pull box within the bus stop island will be removed with the project. The conduit leading to pull box will be stubbed-out and buried with the project.

The WisDOT Communications field contact person is Jeff Madson at (414) 225-3723

**WisDOT Lighting.** WisDOT Lighting has facilities within the project limits. WisDOT Lighting has included facility work to be completed with the project.

The WisDOT Lighting field contact is Eric Perea at (414) 750-0935

**WisDOT Signals.** WisDOT Signals has facilities within the project limits at Lot #67-35 (IH 94 and Barker Rd) and Lot #45-20 (IH 43 and CTH C).

Lot 67-35 –IH 94 WB Ramp and Barker Rd. (S67-0446): The loops will be replaced per Signal Operations plans and specs for the park and ride lot driveway on the exit side left turn lane. The new loops will require a new pull box and conduit in the median side of the park and ride driveway. The loop for the park & ride driveway on the exit side right turn lane will be discontinued.

Lot #45-20 (IH 43 and CTH C) - (S45-0878): WisDOT Signals has reviewed the proposed plan and concluded that no conflicts are anticipated for the existing conduit under the park and ride driveway near the signal at IH43 and CTH C. This conduit is expected to be deep enough not to be impacted.

Loop detector replacement is anticipated at the exit side of the park and ride driveway at the IH 94 westbound ramp and Barker Rd signal. The contractor will coordinate with WisDOT Signals five days prior to beginning WisDOT signal work.

The WisDOT Signal Operations field contact is the WisDOT Electrical Field Unit at (414) 266-1170 or (414) 750-1443.

## **12. Information to Bidders, Soils Report.**

A copy of soils information for the 1000-04-70 Various Park & Rides project is available from the department's regional office by contacting Casey Wierzchowski at (414) 588-0639.

## **13. Erosion Control.**

*Replace standard spec. 107.20(3) with the following:*

The contractor shall prepare and submit an erosion control implementation plan (ECIP) for the project including borrow sites, material disposal sites, dust control, and dewatering according to Chapter TRANS 401 requirements. The erosion control implementation plan shall supplement information shown on the plans and shall not reproduce it. The erosion control implementation plan shall identify how the contractor intends to implement the project's erosion control plan.

Provide the ECIP 14 calendar days prior to the pre-construction conference. Provide 1 copy of the ECIP to WisDOT and 1 copy of the ECIP to the WDNR Transportation Liaison specified in the contacts portion of this contract. Pursue operations in a timely and diligent manner, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-topsoiling to minimize the period of exposure to possible erosion. Do not implement the ECIP until it has been approved by the department.

Do not pump water from the construction site to a storm water conveyance without the water first passing through a sediment trap or filter bag.

Re-topsoil graded areas, as designated by the engineer, immediately after grading is completed within those areas. Seed, fertilizer, and mulch/erosion mat top-soiled areas, as designated by the engineer, within 5 calendar days after placement of topsoil. If graded areas are left exposed for more than 14 calendar days, seed those areas with temporary seed.

When performing roadway cleaning operations, the contractor shall use equipment having vacuum or water spray mechanism to eliminate the dispersion of dust. If vacuum equipment is employed, it shall have suitable self-contained particulate collectors to prevent discharge from the collection bin into the atmosphere.

Stockpile excess material or spoils on upland areas away from wetlands, floodplains and waterways. Stockpiled soil shall be protected against erosion. If stockpiled material is left for more than 14 calendar days, seed the stockpile with temporary seed.

Erosion control BMP's are at suggested locations. The actual locations will be determined by the contractors ECIP and by the engineer. Erosion Control BMP's shall be maintained until permanent vegetation is established or until the engineer determines that the BMP is no longer required.

Follow erosion control best management practices to maintain quality of stormwater exiting all project sites under this contract.

**Wetlands:** Wetlands are present at Lot #45-20 (IH 43 and CTH C), at Lot #67-35 (IH 94 and Barker Road), and near Lot #66-50 (IH 41 and CTH K).

At Lot 45-20, grading of shoulder slopes, and at Lot 67-35, replacing a culvert endwall and riprap, will require compliance with the "Information to Bidders, U. S. Army Corps of Engineers Section 404 Permit" article of these special provisions.

#### **14. Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.**

The work under this contract falls under U.S. Army Corps of Engineers General Permit GP-004-WI, issued January 9, 2013 and expiring December 31, 2017. WDNR 401 Water Quality Certification and concurrence was reached on August 2, 2016. Comply with the requirements of the permit in addition to the requirements of the special provisions. A copy of the permit and WDNR 401 Water Quality Certification is available from the regional office by contacting Linda Matthews at (262) 548-6458.

#### **15. Archaeological Site.**

Lot 67-40 (IH 94 and CTH F) has burial site 44WK148BWK-0256 (Burke) in the project area. The department has obtained authorization from the Wisconsin Historical Society (WHS) under Wisconsin State Statute 157.70 to perform the work under the 1000-04-70 Various Park & Rides contract at Lot 67-40. The Lot 67-40 site shall not be used for borrow and/or waste disposal, and the Lot 67-40 site area not currently capped by asphalt or concrete shall not be used for the staging of personnel, equipment, or supplies.

The department will arrange to have an archaeologist present to monitor ground-disturbing activities beyond the existing back edge of curb (fence replacement area). Contractor shall provide firm date of fence work at Lot 67-40 three weeks in advance of this work in order to schedule the archaeologist. No ground-disturbing work shall be permitted if the archaeologist is not present.

Wisconsin Historical Society authorization expires July 1, 2017. No work at Lot 67-40 shall occur later than 12:01 AM July 1, 2017, including work, if any, that extends beyond the interim completion date of June 22, 2017 mentioned in the Prosecution and progress article of this contract.

## **16. Removing Asphaltic Surface Butt Joint.**

*Replace standard spec 204.3.2.2 (4) with the following:*

(4) Under the Removing Asphaltic Surface Butt Joints bid item, remove asphaltic pavement or surfacing to allow the construction of butt joints. Remove existing asphaltic pavements or surfacing to the depth the plans show by grinding, planing, chipping, sawing, or other engineer-approved methods. Also remove existing concrete curb pan where the plans show and as directed by the engineer to the depth of the adjacent asphaltic pavement removal to allow the construction of butt joints. Remove the existing concrete curb pan by grinding, planing, chipping, sawing, or other engineer-approved methods.

## **17. Pavers.**

*Replace standard spec 450.3.1.4 (1) with the following:*

(1) Ensure that the screed or strike-off assembly produces a finished surface of the required evenness and texture without tearing, shoving, or gouging the mixture. Use a screed adjustable for the required crown and cross section of the finished pavement, and also capable of placing Asphaltic Berm Curb as shown on the plans (Lot 45-60) and as directed by the engineer.

## **18. Permanent Ditch Checks – Lot 66-50.**

### **A Description**

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

### **B Materials**

Provide breaker run stone conforming to standard spec 311.2 (2) subparagraph 1, excluding crushed concrete, crushed masonry, or pit run.

Provide pipe underdrain conforming to standard spec 612.2.6, or 612.2.7.

### **C Construction**

Place permanent ditch checks immediately after shaping of the ditches or slopes is completed. Place permanent ditch checks at right angles to the direction of flow and construct according to the details shown in the plans and as the engineer directs.

If rain events during construction result in accumulated sediment behind the permanent ditch check, remove sediment from behind the permanent check when it has accumulated to one half of the original height of the permanent ditch check.

### **D Measurement**

The department will measure breaker run by the ton of material placed and pipe underdrain by the linear foot, installed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
311.0110	Breaker Run	TON
612.0104	Pipe Underdrain 4-Inch	LF

Payment is full compensation for furnishing, producing, crushing, loading, hauling, placing, and shaping and maintaining the permanent ditch check.

The quantity of sediment removed shall be multiplied by a factor of ten and paid for as Common Excavation.

**19. Removing Apron Endwalls, Item 204.9060.S.01.****A Description**

This special provision describes the removal and disposal of the existing apron endwall located near the northwest corner of Lot 67-35 – IH 94 & Barker Road.

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

Remove precast reinforced concrete apron endwall from the existing storm sewer pipe and riprap bed. Remove any ties connecting the endwall to the storm sewer pipe, taking care to avoid damage to pipe. Dispose of endwall and all associated reinforcement and tie bolts off site.

**D Measurement**

The department will measure Removing Apron Endwalls 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
204.9060.S.01	Removing Apron Endwalls	EACH

Payment is full compensation for disconnecting and removing the endwall from the existing storm sewer pipe, extracting the endwall from existing riprap, any repairs to damage to the existing pipe caused by the removal, and disposal off-site of the endwall and all associated steel or reinforcement.

## **20. Removing 2-Post Bicycle Rack, Item 204.9060.S.02.**

### **A Description**

This special provision describes the removal and disposal of an existing 2-Post bicycle rack, according to the pertinent provisions of standard spec 204 and as hereinafter provided.

### **B (Vacant)**

### **C Construction**

Remove the existing bent galvanized steel hitching-post style bicycle rack, located at Lot 45-30 – IH 43 and CTH C (Pioneer Road), together with the existing concrete post-hole backfill. Dispose of bicycle rack and all associated concrete off-site. Backfill and compact in post holes according to standard spec 204.3.1.2.

### **D Measurement**

The department will measure Removing 2-Post Bicycle Rack by each individual unit, acceptably completed.

### **E Payment**

*Add the following to standard spec 204.5:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.02	Removing 2-Post Bicycle Rack	EACH

Payment is full compensation for removal and disposal off-site of the bicycle rack and all associated concrete, as well as backfilling and compacting within the holes vacated by the bicycle rack posts.

204-025 (20150630)

## **21. Removing Discontinued Payphone Pole, Item 204.9060.S.03.**

### **A Description**

This special provision describes the removal and disposal of a discontinued payphone pole according to the pertinent provisions of standard spec 204 and as hereinafter provided.

### **B (Vacant)**

### **C Construction**

Remove the existing steel pipe discontinued payphone pole, located at Lot 45-20 – IH 43 & CTH C (Pioneer Road), together with the existing concrete post-hole backfill. Disconnect and dispose of former ground wire. Remove existing ground rod and attached hardware. Dispose of payphone pole, associated concrete, and ground rod off-site. Backfill and compact in the resulting void left by the removal according to standard spec 204.3.1.2.

**D Measurement**

The department will measure Removing Discontinued Payphone Pole by each individual unit, acceptably completed.

**E Payment**

*Add the following to standard spec 204.5:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.03	Removing Discontinued Payphone Pole	EACH

Payment is full compensation for removal and disposal off-site of the Discontinued Payphone Pole, all associated concrete, ground rod, ground wire, and associated hardware, as well as backfilling and compacting within the void left by the removal.  
204-025 (20150630)

**22. Removing Discontinued Payphone Stub, Item 204.9060.S.04.****A Description**

This special provision describes the removal and disposal of a discontinued payphone stub according to the pertinent provisions of standard spec 204 and as hereinafter provided.

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

Cut existing conduit, all associated hardware, and discontinued copper telephone cable at top of existing sidewalk.

After sidewalk removal is completed, cut off the discontinued payphone wire and any associated conduit at the top of sidewalk subgrade level. Dispose of all existing conduit, wire, duct tape, and associated hardware off-site.

**D Measurement**

The department will measure Removing Discontinued Payphone Stub by each individual unit, acceptably completed.

**E Payment**

*Add the following to standard spec 204.5:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.04	Removing Discontinued Payphone Stub	EACH

Payment is full compensation for removal and disposal off-site of the Discontinued Payphone Stub, including all conduit, wire, and duct tape located above the sidewalk subgrade. Removing Sidewalk is paid separately.  
204-025 (20150630)

## **23. Removing Bollard, Item 204.9060.S.05.**

### **A Description**

This special provision describes removing an existing bollard according to the pertinent provisions of standard spec 204 and as hereinafter provided. The existing bollard consists of a wooden post painted black & white used in the past as a delineator.

### **B (Vacant)**

### **C Construction**

Remove the existing bollard from the ground. Backfill and compact in the resulting void left by the removal according to standard spec 204.3.1.2.

### **D Measurement**

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

### **E Payment**

*Add the following to standard spec 204.5:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.05	Removing Bollard	EACH

Payment is full compensation for removal and disposal off-site of the Bollard, together with backfilling and compacting in the void left by the removal.  
204-025 (20150630)

## **24. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.**

### **A Description**

#### **A.1 General**

This special provision describes excavating, loading, hauling, and disposing of petroleum contaminated soil at a DNR approved bioremediation facility. The closest DNR approved bioremediation facilities are listed below:

Advanced Disposal Emerald Park Landfill  
W124 S10629 124<sup>th</sup> St.  
Muskego, Wisconsin 53150  
(414) 529-1360

Waste Management Orchard Ridge Landfill  
N96 W13503 County Line Road  
Menomonee Falls, WI 53051  
(262) 253-8620

Perform this work in accordance to standard spec 205 and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated soil.

**A.2 Notice to the Contractor – Contamination beyond Construction Limits – Lot 66-55, IH 94 & 76<sup>th</sup> Street (State Fair).**

The department and others completed testing for soil and groundwater contamination within the project limits at Lot 66-55, IH 94 & 76<sup>th</sup> Street (State Fair Park & Ride). The Phase 2.5 investigation did not identify soil or groundwater contamination within the 1-foot depth of ground anticipated to be disturbed by potential excavation below subgrade (EBS) in the area shown on the Removal Plan.

However, testing indicated that the site has contamination beneath and beyond those limits. Due to the proximity of known contaminants, the contractor is hereby notified that areas near the project may contain foundry sands and/or low level concentrations of diesel range organics, gasoline range organics, and metals. The impacted areas are:

1. Lot 66-55 Station 50+00 to 52+65 from project limits left to project limits right, 0.5 to 6+ feet below ground surface (bgs).
2. Lot 66-55 Station 52+65 to 53+65 from project limits left to 50 feet right of reference line, 3 to 7+ feet bgs.
3. Lot 66-55 Station 53+65 to 54+40 from project limits left to 50 feet right of reference line, 2 feet bgs.

The contractor should control construction activities in these areas to ensure that excavations do not extend beyond the proposed limits. If work does advance into these areas, or if contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer.

The contract provides for an undistributed quantity of 50 cubic yards (approximately 85 tons at an estimated 1.7 tons per cubic yard) of soil should unanticipated EBS encounter contaminated materials or foundry waste in the impacted areas.

Other Conditions: The Phase 2.5 investigation suggested that contaminated groundwater is not expected to be present within the project limits. If groundwater handling or dewatering are necessary during the project, the work shall be temporarily stopped while the engineer is notified and provides a recommendation. No accumulated groundwater from dewatering may be returned to the project.

No active groundwater monitoring wells were observed within the construction limits. If active groundwater monitoring wells are encountered during construction, notify the engineer and protect them to maintain their integrity. The environmental consultant will determine if monitoring wells need to be maintained. For monitoring wells that do need to be maintained, adjust the wells that do not conflict with structures or curb and gutter to be flush with the final grade. For wells that conflict with the previously mentioned items or if monitoring wells are not required to be maintained, they will be abandoned by others.

If dewatering is required at the above locations, conduct the dewatering in accordance with Section C below.

For further information regarding previous investigation and remediation activities at these sites contact:

Name: Andrew Malsom  
Address: 141 NW Barstow Street, PO Box 798, Waukesha, WI 53187-0798  
Phone: (262) 548-6705  
Fax: (262) 548-6891  
E-mail: [andrew.malsom@dot.wi.gov](mailto:andrew.malsom@dot.wi.gov)

### **A.3 Coordination**

**If required**, coordinate work under this contract with the environment consultant:

Consultant: TRC Environmental Corporation  
Address: 150 N. Patrick Blvd. Ste. 180, Brookfield, WI 53045  
Contact: Bryan Bergmann, P.G. or Tyler Stapel, P.E.  
Phone: (262) 901-2126, (262) 901-2142  
Fax: (262) 879-1220  
E-mail: [bbergmann@trcsolutions.com](mailto:bbergmann@trcsolutions.com), [wstapel@trcsolutions.com](mailto:wstapel@trcsolutions.com)

The role of the environmental consultant, **if required**, will be limited to:

1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
2. Identifying contaminated soils to be hauled to the bioremediation facility;
3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
4. Obtaining the necessary approvals for disposal of contaminated soil from the bioremediation facility.

**If required**, coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.

Identify the DNR approved bioremediation facility that will be used for disposal of contaminated soils, and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the bioremediation facility. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

#### **A.4 Health and Safety Requirements**

*Add the following to standard spec 107.1:*

**If excavation activities happen to extend beyond proposed limits and depths shown on the Removal Plan**, expect to encounter soil contaminated with gasoline, diesel fuel, fuel oil, or other petroleum related products. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

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

#### **C Construction**

*Add the following to standard spec 205.3:*

Control construction activities at Lot 40-55 to ensure that excavations do not extend beyond the proposed limits and depths shown on the Removal Plan. If unanticipated conditions result in work advancing into contaminated soil, control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

**If required**, the environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite bioremediation. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

**If required**, directly load and haul soils designated by the environmental consultant for offsite bioremediation to the DNR approved bioremediation facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of petroleum-contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site bioremediation so as not to contain free liquids.

If dewatering is required in areas of known contamination, water generated from dewatering activities will likely contain petroleum and metals. Such water may, with approval of the Milwaukee Metropolitan Sewerage District (MMSD), be discharged to the sanitary sewer as follows:

1. Meet all applicable requirements of the MMSD including the control of suspended solids. Perform all necessary monitoring to document compliance with MMSD's requirements. Furnish, install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with MMSD's requirements.
2. Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities.

Notify the engineer of any dewatering activities, and obtain any permits necessary to discharge water. Provide copies of such permits to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statutes, judiciary decisions, and regulations of the State of Wisconsin.

Costs associated with excavation dewatering in the contaminated area are considered incidental to this pay item. The Wisconsin Department of Transportation will be the generator of regulated solid waste from this construction project.

#### **D Measurement**

The department will measure Excavation, Hauling, and Disposal of Petroleum Contaminated Soil in tons of contaminated soil, accepted by the bioremediation facility as documented by weight tickets generated by the bioremediation facility.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	Ton

Payment is full compensation for excavating, segregating, loading, hauling, and treatment via bioremediation of contaminated soil; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and dewatering of soils prior to transport, if necessary.

205-003 (20150630)

## **25. Pulverize and Relay.**

*Replace standard spec 325.3(2) with the following:*

- (2) Immediately after pulverizing, relay the material with a paver, grader, or both the paver and grader. Use equipment with automatic grade and slope control systems for adjusting the slope through superelevated curves, transitions, and tangent sections and an averaging device to achieve a smooth profile. If the automatic control systems break down, the contractor may use manual controls for the remainder of that day only.

325-001 (20080902)

*Supplement standard spec 325.3(5) with the following:*

- (5) Do not allow pulverized and graded material to be exposed for a period greater than 72 hours prior to placement of the lower layer of HMA pavement. Protect pulverized and graded areas from adverse weather impacts. Payment for removal and excavation below subgrade for areas of pulverized and relayed material previously prepared and approved for paving and left uncovered and requiring removal due to rain shall be at the contractor's expense unless otherwise approved by the engineer.

## **26. 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://wisconsin.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/rdwy/default.aspx>

#### **A.2 Contractor Testing for Small Quantities**

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

- (2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:
1. The contractor need not submit a full quality control plan but shall provide an organizational chart to the engineer including names, telephone numbers, and current certifications of all persons involved in the quality control program for material under affected bid items.
  2. Divide the aggregate into uniformly sized sublots for testing as follows:
- | Plan Quantity                      | Minimum Required Testing   |
|------------------------------------|--|
| $\leq 1500$ tons                   | One test from production, load-out, or placement at the contractor's option <sup>[1]</sup>                           |
| $> 1500$ tons and $\leq 6000$ tons | Two tests of the same type, either from production, load-out, or placement at the contractor's option <sup>[1]</sup> |
| $> 6000$ tons and $\leq 9000$ tons | Three placement tests <sup>[2][3]</sup>  |
- [1] If using production tests for acceptance, submit test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.
- [2] For 3-inch material, obtain samples at load-out.
- [3] If the actual quantity overruns 9000 tons, create overrun sublots to test at a rate of one additional placement test for each 3000 tons, or fraction of 3000 tons, of overrun.
3. No control charts are required. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.
  4. Department verification testing is optional for quantities of 6000 tons or less.
- (3) Material represented by a subplot with any property outside the specification limits is nonconforming. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

## **B Materials**

### **B.1 Quality Control Plan**

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

4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.
5. Descriptions of stockpiling and hauling methods.
6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

## **B.2 Personnel**

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

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

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

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

## **B.3 Laboratory**

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

Materials Management Section  
3502 Kinsman Blvd.  
Madison, WI 53704  
Telephone: (608) 246-5388

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

## **B.4 Quality Control Documentation**

### **B.4.1 General**

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

#### **B.4.2 Records**

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

#### **B.4.3 Control Charts**

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

#### **B.5 Contractor Testing**

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

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

## **B.6 Test Methods**

### **B.6.1 Gradation**

- (1) Test gradation using a washed analysis conforming to the following as modified in CMM 8.60:  
 Gradation..... AASHTO T 27  
 Material finer than the No. 200 sieve..... AASHTO T 11
- (2) For 3-inch base, if 3 consecutive running average points for the percent passing the No. 200 sieve are 8.5 percent or less, the contractor may use an unwashed analysis. Wash at least one sample out of 10. If a single running average for the percent passing the No. 200 sieve exceeds 8.5 percent, resume washed analyses until 3 consecutive running average points are again 8.5 percent passing or less.
- (3) Maintain a separate control chart for each sieve size specified in standard spec 305 or standard spec 310 for each base aggregate size, source or classification, and type. Set control and warning limits based on the standard specification gradation limits as follows:
  1. Control limits are at the upper and lower specification limits.
  2. There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.
  3. Dense graded warning limits, except for the No. 200 sieve, are 2 percent within the upper and lower control limits. Warning limits for the No. 200 sieve are set 0.5 percent within the upper and lower control limits.
  4. Open graded warning limits for the 1-inch, 3/8-inch, and No. 4 sieves are 2 percent within the upper and lower control limits. Upper warning limits for the No. 10, No. 40, and No. 200 sieves are 1 percent inside the upper control limit.

### **B.6.2 Fracture**

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

### **B.6.3 Liquid Limit and Plasticity**

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

## **B.7 Corrective Action**

### **B.7.1 General**

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

### **B.7.2 Placement Corrective Action**

- (1) Do not blend additional material on the roadbed to correct gradation problems.
- (2) Notify the engineer whenever the running average exceeds a warning limit. When two consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
  1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
  2. For fracture, increase the QC testing frequency to at least one test per gradation test.
- (3) If corrective action improves the property in question such that the running average after 4 additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after 4 additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.
- (4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.
- (5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:
  1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
  2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
  3. The fracture control limit is exceeded by more than 10.0 percent.

## **B.8 Department Testing**

### **B.8.1 General**

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

### **B.8.2 Verification Testing**

#### **B.8.2.1 General**

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

#### **B.8.3 Independent Assurance**

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

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

### **B.9 Dispute Resolution**

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

### **C (Vacant)**

### **D (Vacant)**

### **E Payment**

- (1) Costs for all sampling, testing, and documentation required under this special provision are incidental to this work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the non-performance of QMP administrative item.
- (2) For material represented by a running average exceeding a control limit, the department will reduce pay by 10 percent of the contract price for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base

Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.  
301-010 (20151210)

## **27. QMP HMA Pavement Nuclear Density.**

### **A Description**

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

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

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

### **B Materials**

#### **B.1 Personnel**

- (1) Perform HMA pavement density (QC, QV) testing using a HTCP certified nuclear technician I, or a nuclear assistant certified technician (ACT-NUC) working under a certified technician.
- (2) If an ACT is performing sampling or testing, a certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

#### **B.2 Testing**

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

## **B.3 Equipment**

### **B.3.1 General**

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

### **B.3.2 Correlation of Nuclear Gauges**

#### **B.3.2.1 Correlation of QC and QV Nuclear Gauges**

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

#### **B.3.2.2 Correlation Monitoring**

- (1) After performing the gauge correlation specified in B.3.2.1, establish a project reference site approved by the department. Clearly mark a flat surface of concrete or asphalt or other material that will not be disturbed during the duration of the project. Perform correlation monitoring of the QC, QV, and all back-up gauges at the project reference site.

- (2) Conduct an initial 10 density tests with each gauge on the project reference site and calculate the average value for each gauge to establish the gauge's reference value. Use the gauge's reference value as a control to monitor the calibration of the gauge for the duration of the project.
- (3) Check each gauge on the project reference site a minimum of one test per day if paving on the project. Calculate the difference between the gauge's daily test result and its reference value. Investigate if a daily test result is not within 1.5 lb/ft<sup>3</sup> of its reference value. Conduct 5 additional tests at the reference site once the cause of deviation is corrected. Calculate and record the average of the 5 additional tests. Remove the gauge from the project if the 5-test average is not within 1.5 lb/ft<sup>3</sup> of its reference value established in B.3.2.2 (2).
- (4) Maintain the reference site test data for each gauge at an agreed location.

## **B.4 Quality Control Testing and Documentation**

### **B.4.1 Lot and Sublot Requirements**

#### **B.4.1.1 Mainline Traffic Lanes, Shoulders, and Appurtenances**

- (1) A lot consists of the tonnage placed each day for each layer and target density specified in standard spec 460.3.3.1. A lot may include partial sublots.
- (2) Divide the roadway into sublots. A sublot is 1500 lane feet for each layer and target density.
- (3) A sublot may include HMA placed on more than one day of paving. Test sublots at the pre-determined random locations regardless of when the HMA is placed. No additional testing is required for partial sublots at the beginning or end of a day's paving.
- (4) If a resulting partial quantity at the end of the project is less than 750 lane feet, include that partial quantity with the last full sublot of the lane. If a resulting partial quantity at the end of the project is 750 lane feet or more, create a separate sublot for that partial quantity.
- (5) Randomly select test locations for each sublot as specified in CMM 8.15 prior to paving and provide a copy to the engineer. Locate and mark QC density test sites when performing the tests. Perform density tests prior to opening the roadway to traffic.
- (6) Use Table 1 to determine the number of tests required at each station, depending on the width of the lane being tested. When more than one test is required at a station, offset the tests 10 feet longitudinally from one another to form a diagonal testing row across the lane.

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

**Table 1**

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

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

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

**Table 2**

#### **B.4.2 Pavement Density Determination**

##### **B.4.2.1 Mainline Traffic Lanes and Appurtenances**

- (1) Calculate the average subplot densities using the individual test results in each subplot.
- (2) If all subplot averages are no more than one percent below the target density, calculate the daily lot density by averaging the results of each random QC test taken on that day's material.
- (3) If any subplot average is more than one percent below the target density, do not include the individual test results from that subplot when computing the lot average density and remove that subplot's tonnage from the daily quantity for incentive. The tonnage from any such subplot is subject to disincentive pay according to standard spec 460.5.2.2.

##### **B.4.2.2 Mainline Shoulders**

###### **B.4.2.2.1 Width Greater Than 5 Feet**

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

###### **B.4.2.2.2 Width of 5 Feet or Less**

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

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

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

#### **B.4.2.4 Documentation**

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

#### **B.4.3 Corrective Action**

- (1) Notify the engineer immediately when an individual test is more than 3.0 percent below the specified minimum in standard spec 460.3.3.1. Investigate and determine the cause of the unacceptable test result.
- (2) The engineer may require unacceptable material specified in B.4.3 (1) to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine limits of the unacceptable area by measuring density of the layer at 50-foot increments both ahead and behind the point of unacceptable density and at the same offset as the original test site. Continue testing at 50-foot increments until a point of acceptable density is found as specified in standard spec 460.5.2.2(1). Removal and replacement of material may be required if extended testing is in a previously accepted subplot. Testing in a previously accepted subplot will not be used to recalculate a new lot density.
- (3) Compute unacceptable pavement area using the product of the longitudinal limits of the unacceptable density and the full subplot width within the traffic lanes or shoulders.
- (4) Retesting and acceptance of replaced pavement will be according to standard spec 105.3.
- (5) Tests indicating density more than 3.0 percent below the specified minimum, and further tests taken to determine the limits of unacceptable area, are excluded from the computations of the subplot and lot densities.
- (6) If 2 consecutive subplot averages within the same paving pass and same target density are more than one percent below the specified target density, notify the engineer and take necessary corrective action. Document the locations of such sublots and the corrective action that was taken.

#### **B.5 Department Testing**

##### **B.5.1 Verification Testing**

- (1) The department will have a HTCP certified technician, or ACT working under a certified technician, perform verification testing. The department will test randomly at locations independent of the contractor's QC work. The department will perform verification testing at a minimum frequency of 10 percent of the sublots and a minimum of one subplot per mix design. The sublots selected will be within the active work zone. The contractor will supply the necessary traffic control for the department's testing activities.

- (2) The QV tester will test each selected subplot using the same testing requirements and frequencies as the QC tester.
- (3) If the verification subplot average is not more than one percent below the specified minimum target density, use the QC tests for acceptance.
- (4) If the verification subplot average is more than one percent below the specified target density, compare the QC and QV subplot averages. If the QV subplot average is within 1.0 lb/ft<sup>3</sup> of the QC subplot average, use the QC tests for acceptance.
- (5) If the first QV/QC subplot average comparison shows a difference of more than 1.0 lb/ft<sup>3</sup> each tester will perform an additional set of tests within that subplot. Combine the additional tests with the original set of tests to compute a new subplot average for each tester. If the new QV and QC subplot averages compare to within 1.0 lb/ft<sup>3</sup>, use the original QC tests for acceptance.
- (6) If the QV and QC subplot averages differ by more than 1.0 lb/ft<sup>3</sup> after a second set of tests, resolve the difference with dispute resolution specified in B.6. The engineer will notify the contractor immediately when density deficiencies or testing precision exceeding the allowable differences are observed.

#### **B.5.2 Independent Assurance Testing**

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

#### **B.6 Dispute Resolution**

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

## **B.7 Acceptance**

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

## **C (Vacant)**

## **D (Vacant)**

## **E Payment**

### **E.1 QMP Testing**

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

### **E.2 Disincentive for HMA Pavement Density**

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

### **E.3 Incentive for HMA Pavement Density**

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

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

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

460-020 (20100709)

## **28. Field Facilities.**

*Supplement standard spec 642.2.2.1 (3) with the following:*

Field office to be placed near lot 45-20, Pioneer Road Park & Ride, or Lot 45-60, Port Washington Park & Ride, or at a location selected by mutual agreement between the contractor and engineer. Field Office to be open throughout the duration of the entire project. Provide supplies including paper and toner. Provide a portable dumpster with scheduled trash pickup.

## **29. Temporary Pedestrian Safety Fence, Item 644.1616.S.**

### **A Description**

This special provision describes providing, maintaining, and removing the temporary pedestrian safety fence.

### **B Materials**

Furnish notched metal “T” or “U” shaped fence posts weighing 1 1/3 pounds per foot or more.

Furnish select 2x4 dimensional lumber.

Furnish fence fabric meeting the following requirements.

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

The engineer may allow prefabricated fencing systems conforming to Americans with Disabilities Act Accessibility Guidelines.

### **C Construction**

Provide a continuous safety fence with the top edge free of sharp or rough edges.

Repair or reconstruct installations disturbed during construction operations. Remove and dispose of as specified in standard spec 204.3 when no longer required.

### **D Measurement**

The department will measure Temporary Pedestrian Safety Fence by the linear foot, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
644.1616.S	Temporary Pedestrian Safety Fence	LF

Payment is full compensation for providing, maintaining, and removing the temporary pedestrian safety fence.

644-025 (20150630)

**30. Salvaging Bus Shelter, Item SPV.0060.01.****A Description**

Remove, handle, store, and re-erect the bus shelter and all appurtenant hardware without damaging the parts. Replace contractor-damaged parts and provide all other materials, required to re-erect the bus shelter. Dispose of surplus used materials. Also remove, handle, store, and re-erect existing trash cans where present on the bus stop island.

**B Material**

Provide all new anchor bolts.

Furnish anchor bolts and anchor flanges to the designated manufacturer's specifications for Handi-Hut Shelters.

Handi-Hut, Inc.  
3 Grunwald Street  
Clifton, NJ 07013  
(800) 603-6635  
[www.handi-hut.com](http://www.handi-hut.com)

**C Construction**

Re-install Handi-Hut bus shelter at the location shown on the plan per the manufacturer's requirements including new anchor bolts. Replace damaged anchor flanges with new anchor flanges. Where approved by engineer, re-use un-damaged anchor flanges. Provide the engineer with a copy of manufacturer's instructions prior to any work. Adjust shelter to level condition by raising or lowering shelter and then securing legs within anchor flanges as the plans show and as the engineer directs.

In the event that damage does occur to any item that is designated for re-use in the new work, repair or replace the damaged item at no expense to the department.

Also remove, handle, store, and re-set after sidewalk replacement, all existing unanchored sidewalk furniture such as trash cans, where present on the bus stop island.

**D Measurement**

The department will measure Salvaging Bus Shelter as each individual 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.0060.01	Salvaging Bus Shelter	EACH

Payment is full compensation for removing the bus shelter and existing damaged anchor flanges; properly storing the bus shelter, providing and installing new anchor bolts, replacing the bus shelter, levelling the bus shelter including adjustments to new and/or existing anchor flanges, and all incidental work necessary to complete the contract work. Handling existing unanchored sidewalk furniture such as trash cans at the bus stop shall be incidental to this bid item.

**31. Salvaging Bicycle Locker, Item SPV.0060.02.****A Description**

Remove, handle, store, and re-install the bicycle locker and all appurtenant hardware without damaging the parts. Replace contractor-damaged parts and provide all other materials, required to re-install the bicycle locker. Dispose of any surplus materials.

**B Material**

Provide all new surface mounting hardware (stainless steel expansion anchors).

Furnish stainless steel expansion anchors, length not to exceed 3 ½” and minimum diameter 3/8”, to the designated manufacturer’s specifications for Madrax Mad Locker surface mounting hardware.

Madrax division of Graber Manufacturing, Inc.  
1080 Uniek Drive  
Waunakee, WI 53957  
(800) 448-7931  
[www.madrax.com](http://www.madrax.com)

**C Construction**

Remove the bicycle locker, taking care not to damage it. Store the bicycle locker in an area away from construction activities to preclude damage to the bicycle locker. Re-install the bicycle locker on the new sidewalk where the plans show and as directed by the engineer.

In the event that damage does occur to any item that is designated for re-use in the new work, repair or replace the damaged item at no expense to the department.

**D Measurement**

The department will measure Salvaging Bicycle Locker as each individual 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.0060.02	Salvaging Bicycle Locker	Each

Payment is full compensation for removing the existing bicycle locker; properly storing the bicycle locker; and for reinstalling bicycle locker in the new concrete sidewalk where the plans show and as directed by the engineer. In addition, salvage of the bike rack at Lot 67-35 (Goerkes Corners) shall be compensated under this item.

**32. Cleaning Inlets, Item SPV.0060.03.****A Description**

This special provision describes the removal and disposal of accumulated sand, gravel, and other debris in existing inlets.

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

Remove inlet grate, remove sand, gravel, and other debris trapped in the inlet structure, and replace grate. Follow all applicable OSHA requirements pertaining to confined spaces. Inlets may be connected to existing storm sewer systems and as such the absence of hazardous atmospheric conditions in the system cannot be guaranteed. Mechanized vacuum/excavation equipment is permissible.

**D Measurement**

The department will measure Cleaning Inlets 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.0060.03	Cleaning Inlets	EACH

Payment is full compensation for removal and replacement of the inlet grate, removal and disposal off-site of the debris from the inlet, and all associated labor, safety measures or equipment including but not limited a vacuum truck.

**33. Connecting Pipe Underdrain 4-Inch to Existing Inlet, Item SPV.0060.04.****A Description**

This special provision describes excavating, drilling/coring/cutting, removing debris from the work, installing pipe underdrain, and backfilling at inlets in locations where the engineer directs. The intent is to provide positive drainage in the proposed pipe underdrain between the inlet and the base of the EBS backfill or base aggregate beneath paved areas or sidewalk.

## **B Materials**

Furnish mortar conforming to standard spec 501.

## **C Construction**

Install according to the plan details for the intended use, as directed by the engineer in the field. Connect new Pipe Underdrain 4-Inch to existing inlets as shown on the plan or as directed by the engineer.

Provide an excavation adjacent to existing inlet structure large enough to complete the required work. Verify that existing underground utilities have been marked and that no conflicts exist with the pipe underdrain finalizing the excavation for line and grade of pipe underdrain. The utilities crossing near the pipe underdrain do not anticipate conflicts.

Core or drill a hole in sidewall of the existing inlet structure, of sufficient diameter to accommodate Pipe Underdrain 4-Inch. Install Pipe Underdrain 4-Inch the full thickness of the concrete inlet wall, plus 4-inches extending into the inlet box. Mortar the space between the pipe underdrain and the inside of the hole in the inlet wall. Place the hole at the location shown on the plans or as directed by the engineer.

Backfill the excavation in lifts of 8 inches and compact each lift prior to placing the next lift, to prevent settlement of the material supporting the pipe underdrain, or settlement of the completed ground surface adjacent to the inlet.

Meet the pertinent requirements as set forth in standard spec 612.3.5 (2) amended as follows:

The contractor may backfill Pipe Underdrain 4-inch at the inlet and within the landscape area suitable material from the trench or roadway excavation. Beneath paved areas, backfill the pipe underdrain with base aggregate open graded.

## **D Measurement**

The department will measure Connecting Pipe Underdrain 4-Inch to Existing Inlet by each unit, placed and accepted according to the contract.

## **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.04	Connecting Pipe Underdrain 4-Inch to Existing Inlet	EACH

Payment for the item is full compensation for excavating at the inlet, coring, cutting, or drilling, cleaning, including removal of the concrete core from hole drilled in the wall of the inlet; for any checking of elevations; for any associated dewatering; for providing and placing mortar, providing and placing all backfill; for maintaining temporary drainage; and for disposing of surplus material. The Pipe Underdrain 4-inch, Base Aggregate Open Graded, Base Aggregate Dense 1 1/4", Base Aggregate Dense 3/4", and/or Breaker Run items are paid separately as part of the roadway work and use of these materials for Connecting

Pipe Underdrain 4-Inch to Existing Inlet are incidental to the Connecting Pipe Underdrain 4-Inch to Existing Inlet bid item.

### **34. Roadway Lighting Systems.**

#### **A 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 standard 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:

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

Arrange pickups and deliveries 3 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 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.

The plans show required disconnections of existing lighting circuits, most in the form of abandoning existing underground conductors in place. The contractor may need to mobilize several times per each existing lighting distribution center. The contractor is expected to build these costs into the various paid items for removals and installations.

Replace all existing slotted junction box cover screws with stainless hex head cover screws at each location where it is required to open the cover of an existing lighting junction box.

*Add the following to standard spec 651.5:*

Work to disconnect and connect conductors will be incidental to the paid measurement of footage.

There will be no measurement for payment for abandoning conductors or removing conductors for scrap.

Work to disconnect and connect electrical system, splice through, or to connect conductors are incidental to the installation or removal of the freeway lighting pay items included in this contract. The department will not measure conductors or conduits that have been abandoned in place or removed for scrap. The department will allow, at the contractor's discretion, for the salvaging of conductors to be abandoned, if possible.

*Add the following to standard spec 652.3.1:*

Install minimum 3-inch diameter PVC conduit elbows in a ground mounted concrete bases to accommodate Cable in Duct (CID) type cable.

*Add the following to standard spec 652.3.1.2:*

Furnish and install an UL-listed liquid tight flexible metallic conduit transition wherever a conduit exits from below grade.

Furnish a UL-listed fitting appropriate for the purpose at each transition from one type of conduit to another type. Couplings will not be individually measured for payment.

*Add the following to standard spec 652.3.1.4:*

Support conductors at the top of the vertical raceway or as close as practical if the vertical rise exceeds 40-feet. Provide additional supports as shown; in no case shall the distance between supports exceed that shown in Table 300.19(A) of the Wisconsin State Electric Code.

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

**Submittal Requirements for LED luminaires:** Considering the rapid advancement in LED technology, the overall project construction and duration of construction, within 10 calendar days after contract execution, the contractor is responsible to coordinate the lead time for LED luminaires purchase and installation schedule for LED luminaires with the engineer and the department's Lighting engineer, Eric Perea, at [eric.perea@dot.wi.gov](mailto:eric.perea@dot.wi.gov) or at (262) 574-5422 prior to order LED luminaires. The LED luminaires purchasing may be done during later stage of construction as directed by the department which shall not delay the construction.

*Add the following to standard spec 659.3:*

Provide and install / replace Plaques Light Pole on all poles located in the median at a mounting height of 6-inch above the highest adjacent safety barrier or obstruction.

High mast tower luminaires shall be 1000 Watts, High Pressure Sodium, M-C-II type distribution or LED equivalent.

*Add the following to standard spec 659.3.1:*

Contractor shall be responsible to provide adequate temporary roadway lighting during all the construction stages not shown on the temporary lighting plans, but which are necessitated by field conditions or by any construction phasing changes. Installation of temporary lighting not shown on temporary lighting plans shall be paid according to appropriate pay items included in this contract. Contractor shall be responsible to submit a redline markup plans for any additional temporary lighting to the engineer for approval prior to installation.

### **35. Removing Luminaires, Item SPV.0060.11.**

#### **A Description**

The work under this item shall consist of removing existing luminaires from light poles intended to remain in service as shown on the plans. Removed luminaires shall become the property of the contractor and shall be disposed of off the project site. Lamp disposal will be measured and paid separately.

#### **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 materials shall be removed as described on the plans and as directed by the engineer. Dispose of all materials off the site, except sodium vapor lamps. Lamps shall be disposed of under the requirement of a separate pay item.

#### **D Measurement**

The department will measure Removing Luminaires by each unit removed and disposed of, as directed by the engineer.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.11	Removing Luminaires	Each

Payment will be full compensation for removing luminaires; and for disposal of all removed materials.

659-SER3 (20160330)

### **36. Lamp Disposal High Intensity Discharge, Item SPV.0060.12.**

#### **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.

Deliver the lamps to the department at the South 60<sup>th</sup> 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 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.0060.12	Lamp Disposal High Intensity Discharge	EACH

Payment is full compensation for handling, packaging, labeling and delivering the lamps. Payment will be in addition to payment for the work under which the lamps are removed from service.

659-SER2 (20160322)

### **37. Concrete Bases Type 5 Special, Item SPV.0060.13.**

#### **A Description**

This special provision describes furnishing and installing concrete bases type 5 special as shown on the plans and as directed by the engineer.

#### **B Materials**

Materials shall confirm pertinent requirements of standard spec 654.2.

#### **C Construction**

Construction shall confirm pertinent requirements of standard spec 654.3. The concrete base size shall be as shown on the plans.

#### **D Measurement**

The department will measure Concrete Bases Type 5 Special as each individual base installed and acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.13	Concrete Bases Type 5 Special	Each

Payment shall be made as described in standard spec 654.5(2).

654-SER1 (20160330)

### **38. Post Top Luminaires Utility LED, Item SPV.0060.14.**

#### **A Description**

This special provision describes furnishing and installing Post Top Luminaires Utility LED.

#### **B Materials**

*Add the following to standard spec 659.2*

(2) Furnish black finish Post Top Luminaire Utility LED. Luminaires shall be IESNA Type V Medium distribution, delivering a minimum of 4,500 lumens; UL listed, and rated IP 55 or higher. The housing access shall be tool-free.

LED lamps shall be in the 4000K color temperature range with a minimum of 70 CRI.

The luminaire shall be equipped with a voltage-sensing LED driver, to accommodate 120-277V with 90% power factor and THD 20% max at full load. Surge protection shall be provided and tested according to the specifications. The luminaire shall also be equipped with a quick-disconnect plug for connecting the pole riser wires to the terminal block. A strain relief shall retain the pole riser wires within the luminaire.

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

### **C Construction**

*Replace standard spec 659.3.4 (2) with the following:*

(2) Under the Post Top Luminaires Utility LED bid item, provide post-top luminaires utility LED 70W, together with the hardware and fittings and all necessary miscellaneous accessories to complete the installation.

The contractor shall follow manufacturer's instructions regarding luminaire installation.

Three single-conductor No. 12 stranded wires shall be used to connect the luminaires to their respective branch conductors in the pole base. Each luminaire feeder wire shall be protected by one 5-amp fuse. Fuses and fuse holders shall be as per the details in the Plan.

All exposed threaded equipment mounting hardware shall be stainless steel.

The contractor shall coat all threaded stainless steel hardware and dissimilar metal, threaded hardware with an approved zinc-based anti-seize compound (Loctite or Jet-Lube prior to assembly.

### **D Measurement**

The department will measure Post Top Luminaires Utility LED as each individual unit, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.14	Post Top Luminaires Utility LED	EACH

Payment is full compensation for furnishing and installing all materials, including luminaire, accessories, hardware and fittings necessary to install the luminaire workable first class condition.

659-SER4 (20160330)

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

#### **A Signal Inspection**

*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.

#### **B 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 boxes; for excavating, bedding, and backfilling, including any sand, concrete, or other required materials; for disposing of surplus materials; and for making inspections.

*Replace standard spec 652.5 (4) with the following:*

(4) Payment for Conduit Loop Detector is full compensation for providing all materials, including conduit, compacted backfill, surface sealer if required, pull wire if required, condulets, conduit fittings, and for making necessary connections into existing pull boxes.

### **40. Remove Loop Detector Wire and Lead-in Cable IH 94 WB OFF RAMP & CTH Y (S. BARKER ROAD), Item SPV.0105.01.**

#### **A Description**

This special provision describes removing loop detector wire and lead-in cable at IH 94 WB off ramp & CTH Y (S. Barker Road). Removal will be according to standard spec 204, as shown in the plans, and as hereinafter provided.

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

#### **C Construction**

Notify the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to the removal of the loop detector wire and lead-in cable.

Remove and dispose of detector lead-in cable including loop wire for abandoned loops off the right-of-way.

**D Measurement**

The department will measure Remove Loop Detector Wire and Lead-in Cable as a single lump sum unit of work for each intersection, 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.0105.01	Remove Loop Detector Wire and Lead in Cable, IH 94 WB off ramp & CTH Y (S. Barker Road).	LS

Payment is full compensation for removing, scrapping, and disposing of material and incidentals necessary to complete the contract work.

**41. Lighting System Survey, Item SPV.0105.11.****A Description**

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

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

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

**D Measurement**

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

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.11	Lighting System Survey	LS

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

650-SER1 (20160323)

## **42. Construction Staking Sidewalk, Item SPV.0165.01.**

### **A Description**

This section describes the contractor-performed construction staking as required to establish the horizontal and vertical position for sidewalk and associated curb ramps. This work shall be according to the applicable provisions of standard spec 650.

### **B (Vacant)**

### **C Construction**

Set additional construction stakes as necessary to establish location and grade of the sidewalk including points of change in alignment and grade according to the plans. Plan and layout all points necessary to establish horizontal and vertical position of the sidewalk and curb ramps according to Americans with Disabilities Act (ADA) Accessibility Guidelines (ADAAG) and as detailed in the plans.

### **D Measurement**

The department will measure Construction Staking Sidewalk by the square foot of sidewalk, acceptably completed.

### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Construction Staking Sidewalk	SF

Payment for Construction Staking Sidewalk bid item is full compensation for planning and layout of sidewalk and all curb ramps including setting lath, stakes, pins, string line or other materials used to establish the horizontal and vertical position of the sidewalk and curb ramp; and for resetting damaged or missing construction staking materials.

## **43. Construction Staking Parking Lots Subgrade, Item SPV.0180.01.**

### **A Description**

Perform the work according to the applicable provisions of standard spec 650.3.3 for Subgrade; and standard spec 650.3.4 for base.

### **B (Vacant)**

### **C Construction**

Set additional construction stakes as necessary to establish location and grade of the parking lots including points of change in alignment and grade according to the plans.

### **D Measurement**

The department will measure Construction Staking Parking Lots Subgrade by the square yard, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.01	Construction Staking Parking Lots Subgrade	SY

Payment for Construction Staking Parking Lots Subgrade bid item is full compensation for locating and setting all construction stakes; for relocating and resetting damaged or missing construction stakes.

**44. Construction Staking Parking Lots Base, Item SPV.0180.02.****A Description**

Perform the work according to the applicable provisions of standard spec 650.3.3, for subgrade, and standard spec 650.3.4 for base,

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

Set additional construction stakes as necessary to establish location and grade of the parking lots including points of change in alignment and grade according to the plans.

**D Measurement**

The department will measure Construction Staking Parking Lots Base by the square yard, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.02	Construction Staking Parking Lots Base	SY

Payment for Construction Staking Parking Lots Base bid item is full compensation for locating and setting all construction stakes; for relocating and resetting damaged or missing construction stakes.

**45. Construction Staking Parking Lots Concrete Pavement & Driveways, Item SPV.0180.03.****A Description**

Perform the work according to the applicable provisions of standard spec 650.3.8.

**B (Vacant)**

**C Construction**

Set additional construction stakes as necessary to establish location and grade of the parking lots including points of change in alignment and grade according to the plans.

**D Measurement**

The department will measure Construction Staking Parking Lots Concrete Pavement & Driveways by the square yard, acceptably completed.

**E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.03	Construction Staking Parking Lots Concrete Pavement & Driveways	SY

Payment for Construction Staking Parking Lots Concrete Pavement & Driveways bid item is full compensation for locating and setting all construction stakes; for relocating and resetting damaged or missing construction stakes.

**46. Resin Binder High Friction Surface Treatment, Item SPV.0180.04.****A Description**

This special provision describes providing a high friction surface treatment (HFST) composed of aggregate in a resin binder on HMA or concrete pavements.

**B Materials****B.1 Resin Binder**

Supply a two-part thermosetting resin binder which is compatible with the pavement type, bonds to the pavement surface, holds the aggregate firmly in place in a broad range of climates including below-freezing temperatures, and meets the requirements specified in Table 1. Supply a primer if recommended by the resin binder manufacturer.

**Table 1. Resin Binder Properties**

Property	Requirements	Test Method*
Viscosity	7 – 30 poises	ASTM D2556 1-pint specimen
Gel Time	10-minute minimum	ASTM C881 60g mass
Ultimate Tensile Strength	2,000 – 5,000 psi @ 7 days	ASTM D638 Type 1 specimen
Elongation at Break	30% - 70% @ 7 days	ASTM D638 Type 1 specimen
Compressive Strength	≥ 1000 psi @ 3 hrs. & ≥ 5000 psi @ 24 hours	ASTM D695**

Property	Requirements	Test Method*
Water Absorption	$\leq 1.0\%$ @ 24-hr	ASTM D570 24-hr immersion
Shore D Hardness	60 – 80 @ 7 days	ASTM D2240*** Type 1 precision, Type D method
Cure Rate	$\leq 3$ hours (Dry Through Time)	ASTM D1640 50-55 wet mil thickness***
Adhesive Strength	250 psi @ 24 hours or 100% substrate failure	ASTM C1583***

\* Prepare samples per manufacturer's recommendation; cure all specimens at  $73 \pm 2^\circ\text{F}$  and at  $50 \pm 2^\circ\text{F}$ ; and test all specimens at  $73 \pm 2^\circ\text{F}$

\*\* 2" x 2" cubes made of 2.75 parts of 20-30 mesh sand to 1 part mixed resin binder; use plastic inserts in oversized molds to produce 2" cubes

\*\*\* Conduct testing on applicable pavement type

## B.2 Aggregate

Furnish calcined bauxite aggregate that is fractured or angular in shape; resistant to polishing and crushing; clean and free of surface moisture; free from silt, clay, asphalt, or other organic materials; compatible with the resin binder; and meet the properties and gradation requirements in Tables 2 and 3. Check with resin binder manufacturer for any compatibility requirements or concerns.

**Table 2. Aggregate Properties**

Property	Requirements	Test Method
Moisture Content	$\leq 0.2\%$	AASHTO T 255
Fine Aggregate Angularity	$\geq 45\%$	AASHTO T 304, Method A
Micro-Deval	$\leq 15\%$ loss	ASTM D7428
LA Wear	$\leq 10\%$ loss @ 100 revolutions and $\leq 25\%$ loss @ 500 revolutions	AASHTO T 96
Freeze-Thaw Soundness	$\leq 9\%$ loss @ 50, 16, or 25 cycles using Procedure A, B, or C, respectively	AASHTO T 103

**Table 3. Aggregate Gradation (AASHTO T27)**

Sieve Size	% Passing by Weight
No. 4	100
No. 6	95
No. 16	0-5
No. 30	0-1

## B.3 Approval of High Friction Surface Treatment

A minimum of 20 working days before applying HFST, submit product data sheets and specifications from the manufacturer, and a certified test report from an independent

laboratory verifying that the resin binder and the calcined bauxite aggregate meet all the requirements specified in Tables 1, 2 and 3. Documents must be dated within three years.

If resin binder has not been previously used in Wisconsin, also submit a list of at least five reference projects where the resin binder has been used for similar applications and in locations that have similar climatic conditions as Wisconsin. Supply a description of the projects along with contact information of the facility owner.

If the engineer requests, provide samples of the resin binder and aggregate for department testing before applying HFST.

## **C Construction**

### **C.1 General**

The contractor will provide documentation showing HFST application experience from at least three previous projects completed for WisDOT or other agencies.

Conduct a meeting with the resin binder manufacturer representatives before applying HFST to establish procedures for maintaining optimum working conditions and coordination of the work. Submit recommended application procedures, including quality control practices, to the engineer for approval. Ensure that a resin binder manufacturer representative is on site to provide technical assistance and quality assurance during surface preparation and for application of HFST.

Ensure that the resin binder components maintain their original properties during storage and handling. Store all aggregate in a dry environment and protect from contaminants on the job site.

### **C.2 Pavement Surface**

#### **C.2.1 Pavement Surface Repair**

Remove visibly unsound or disintegrated areas of the pavement surface as the plans show or the engineer directs.

Check with resin binder manufacturer to ensure that products used for pavement repairs or patches are compatible with the resin HFST. Ensure that any new concrete or repairs are fully cured before placing the HFST.

#### **C2.2 Surface Preparation**

Cover and protect utilities, drainage structures, expansion joints on bridge decks, and other structures within or adjacent to the application location to prevent materials from adhering to or entering those structures.

Remove pavement markings that are within the treatment area. Cover existing pavement markings adjacent to the application if they are to remain in place.

Seal all joints and cracks, or any portion of cracks that are greater than 1/4 inch wide, with a joint sealant conforming to ASTM D6690. Apply sealant flush with, or just below, the pavement surface. Do not overfill and ensure excess joint sealant is not visible on the pavement surface.

After all pavement repairs or patches have completely cured, and no more than 24 hours before HFST application, prepare a concrete pavement surface by shot blasting to roughen the surface texture. Ensure the pavement surface has no grease, oil, curing compound, loosely bonded mortar, pavement marking, or other foreign matter resting on the pavement surface.

Completely remove any grease, oil, pavement marking, or other foreign matter resting on an HMA pavement surface that could prevent proper bonding of the resin binder by shot blasting. Shot blast entire HMA pavement surfaces that are less than 30 days old prior to cleaning and installing HFST.

Sufficiently clean HMA and concrete pavement surfaces by vacuum-sweeping and blowing, with oil-free compressed air, just before applying HFST. Compressors must be equipped with functioning oil/water separators. Cleaning must be done the same day that HFST will be applied. Ensure the surface is clean, completely dry, and free of all dust, oil, debris and other material that might interfere with the bond between the resin binder and the existing pavement surface.

If the engineer requires additional verification of adequate surface preparation of the pavement, test the bond strength according to ASTM C1583. The surface is acceptable if the tensile bond strength is greater than or equal to 250 psi, or failure is in the substrate. Repeat shot blasting, cleaning, and testing, if needed, until passing test results are obtained or the surface is acceptable to the engineer.

Keep vehicles and unnecessary equipment off the cleaned surface; only allow HFST application equipment on the clean surface. Apply HFST as soon as possible after pavement surface preparations are completed.

Abide by the established quality control practices and adhere to any additional manufacturer recommendations for surface preparation. Request that the engineer inspect and approve the pavement surface before placing the HFST.

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

Do not apply the HFST if any of the following exists:

- Pavement surface is wet, damp, or has received rainfall in the previous 24 hours.
- Pavement surface is not sufficiently clean.
- Ambient air or pavement surface temperature is below 50° F or below the manufacturer's recommendations.
- If the anticipated weather conditions would prevent adequate curing of the HFST.
- Rain is predicted before HFST completion or proper cure is achieved.
- Pavement preparation is inadequate or didn't pass pull-off test.

Close treatment areas to traffic until HFST is completely cured and pavement surface has been vacuum-swept.

Construct HFST to the full width of the existing pavement surface, or as the plans show or engineer directs. Extend the HFST application 2'-3' into the shoulders if application site is on a curve, Apply as a single layer 1/8 inch to 1/4 inch thick.

Apply a primer to the pavement surface if recommended by the resin binder manufacturer, and according to their application recommendations. Abide by the established quality control practices and adhere to any additional manufacturer recommendations for HFST application.

Blend and mix the resin binder components at the manufacturer's specified ratio using equipment capable of providing the desired results.

Apply the resin binder uniformly over the pavement surface manually or with automated equipment at a uniform thickness of 50-65 mils (25-32 SF/gal). Use enough resin to cover the pavement surface and sufficiently embed half the thickness of the aggregate; do not apply so much that it covers the aggregate and creates a slick surface. Adjust application rate, as needed, based on the pavement surface type, profile, and condition.

If using automated equipment, ensure that the equipment features positive displacement, volumetric metering, and is capable of storing, mixing, heating, monitoring, and distributing the binder components at the proper mix ratio. Adjust the pressure and the speed of the equipment to achieve the proper application thickness. If applying the binder by hand, use a serrated edged squeegee to spread the resin binder and provide uniform coverage at the proper thickness.

Do not contaminate the wet binder or allow the binder material to separate or cure, and impair bonding of the aggregate.

Immediately after applying the resin binder, distribute a sufficient quantity of dry calcined bauxite aggregate to completely cover the resin binder by hand broadcasting or by using a standard chip spreader or equivalent machine. Ensure aggregate is placed within five minutes of the resin binder placement, before it begins to cure. When broadcasting, sprinkle or drop the aggregate onto the resin binder vertically. Do not distribute aggregate in a way that will cause it to roll in the resin binder before coming to a rest; do not push the aggregate into position with a broom or any other hand tool. If using a chip spreader, the machine shall follow closely behind the crew or equipment applying the resin binder. Immediately cover any visible wet or bare spots, or areas with excessive binder, with additional calcined bauxite aggregate before the resin binder begins to set.

Allow the HFST to properly cure, adhering to manufacturer recommendations for minimum cure times at applicable temperatures.

After the HFST is fully cured, remove excess loose surface aggregate by sweeping, blowing, or vacuuming. Do not tear or otherwise damage the surface. Excess calcined bauxite aggregate that is recovered by a vacuum sweeper can be reused if clean, uncontaminated and dry. Remove and replace damaged areas or areas with excess or insufficient aggregate coverage. Clean expansion joints, utilities, and drainage structures of all debris before opening to traffic.

Additionally, within 3 to 7 days after opening to traffic, vacuum sweep the pavement surface to remove loosened aggregate from the high friction surface area, the shoulders, and any other areas within and immediately adjacent to the HFST site.

#### **D Measurement**

The department will measure Resin Binder High Friction Surface Treatment by the square yard, acceptably completed.

#### **E Payment**

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.04	Resin Binder High Friction Surface Treatment	SY

Payment for Resin Binder High Friction Surface Treatment is full compensation for testing materials; for preparing the pavement surface; for providing the HFST; for cleanup; and for vacuum sweeping and disposing of excess material after the completion and again 3 to 7 days after completion.

The department will pay for pavement repairs, joint and crack sealing, and traffic control separately under other contract bid items, or, absent the appropriate bid items, as extra work.



## **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:*

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**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 <sup>[1]</sup>	+1.3/-1.0	+1.0/-0.7
VMA in percent <sup>[2]</sup>	- 0.5	- 0.2

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

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

**460.2.8.2.1.6 Job Mix Formula Adjustment**

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

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

**460.2.8.3.1.6 Acceptable Verification Parameters**

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

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

**460.3.3.1 Minimum Required Density**

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

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

**TABLE 460-3 MINIMUM REQUIRED DENSITY<sup>[1]</sup>**

LOCATION	LAYER	PERCENT OF TARGET MAXIMUM DENSITY		
		MIXTURE TYPE		
		LT and MT	HT	SMA <sup>[5]</sup>
TRAFFIC LANES <sup>[2]</sup>	LOWER	93.0 <sup>[3]</sup>	93.0 <sup>[4]</sup>	—
	UPPER	93.0	93.0	—
SIDE ROADS, CROSSOVERS, TURN LANES, & RAMPS	LOWER	93.0 <sup>[3]</sup>	93.0 <sup>[4]</sup>	—
	UPPER	93.0	93.0	—
SHOULDERS & APPURTENANCES	LOWER	91.0	91.0	—
	UPPER	92.0	92.0	—

<sup>[1]</sup> 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.

<sup>[2]</sup> Includes parking lanes as determined by the engineer.

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

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

<sup>[5]</sup> The minimum required densities for SMA mixtures are determined according to CMM 8-15.

**460.5.2.1 General**

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

- (6) If during a QV dispute resolution investigation the department discovers mixture with  $1.5 > V_a > 5.0$  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<sup>[1]</sup>**

PERCENT LOT DENSITY ABOVE SPECIFIED MINIMUM	PAY ADJUSTMENT PER TON <sup>[2]</sup>
From -0.4 to 1.0 inclusive	\$0
From 1.1 to 1.8 inclusive	\$0.40
More than 1.8	\$0.80

<sup>[1]</sup> SMA pavements are not eligible for density incentive.

<sup>[2]</sup> The department will prorate the pay adjustment for a partial lot.

**501.2.6 Fly Ash**

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

**501.2.6.1 General**

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

**501.2.6.2 Class C Ash**

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

**501.2.6.3 Class F Ash**

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

**502.3.7.8 Floors**

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

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

**503.3.2.1.1 Tolerances**

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

**PRESTRESSED CONCRETE I-TYPE GIRDERS**

Length of beam..... +/- 1/8" per 10', up to a max of +/- 1 1/2"

## Errata

Make the following corrections to the standard specifications:

### Throughout the contract:

Update all references to the construction rental rate "Blue Book" to reference "EquipmentWatch" rates.

#### 105.13.4 Content of Claim

- (1) Include the following 5 items in the claim.
  1. A concise description of the claim.
  2. A clear contractual basis for the claim. This should include reference to 104.2 on revisions to the contract and as appropriate, specific reference to contract language regarding the bid items in question.
  3. Other facts the contractor relies on to support the claim.
  4. A concise statement of the circumstances surrounding the claim and reasons why the department should pay the claim. Explain how the claimed work is a change to the contract work.
  5. A complete breakdown of the costs used to compile the claim. Include copies of all EquipmentWatch equipment rental rate sheets used, with the applicable number highlighted.

#### 109.4.5.5.1 General

- (2) The department will pay for use of contractor-owned equipment the engineer approves for force account work at published rates. The department will pay the contractor expense rates, as modified in 109.4.5.5, given in EquipmentWatch Cost Recovery (formerly Rental Rate Blue Book) . Base all rates on revisions effective on January 1 for all equipment used in that calendar year.

<http://equipmentwatch.com/estimator/>

#### 109.4.5.5.2 Hourly Equipment Expense Rates (Without Operators)

- (1) The contractor shall determine, and the department will confirm, hourly equipment expense rates as follows:

$$\text{HEER} = [\text{RAF} \times \text{ARA} \times (\text{R}/176)] + \text{HOC}$$

Where:

HEER = Hourly equipment expense rate.

RAF = EquipmentWatch regional adjustment factor.

ARA = EquipmentWatch age rate adjustment factor.

R = Current EquipmentWatch monthly rate.

HOC = EquipmentWatch estimated hourly operating cost.

- (2) The EquipmentWatch hourly operating cost represents all costs of equipment operation, including fuel and oil, lubrication, field repairs, tires, expendable parts, and supplies.

#### 109.4.5.5.3 Hourly Equipment Stand-By Rate

- (1) For equipment that is in operational condition and is standing-by with the engineer's approval, the contractor shall determine, and the department will confirm, the hourly stand-by rate as follows:

$$\text{HSBR} = \text{RAF} \times \text{ARA} \times (\text{R}/176) \times (1/2)$$

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

- (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:

$$\text{HORER} = \text{HRI} + \text{HOC}$$

Where:

**HORER** = Hourly outside-rented equipment rate

**HRI** = Hourly rental invoice costs prorated for the actual number of hours that rented equipment is operated solely on force account work

**HOC** = EquipmentWatch hourly operating cost.

## 109.2 Scope of Payment

Correct errata to clarify that work under the contract is included in payment unless specifically excluded.

- (2) The department will pay for the quantity of work acceptably completed and measured for payment as the measurement subsection for each bid item specifies. Within the contract provide means to furnish and install the work complete and in-place. Payment is full compensation for everything required to perform the work under the contract including, but not limited to, the work elements listed in the payment subsection. Payment also includes all of the following not specifically excluded in that payment subsection:
1. Furnishing and installing all materials as well as furnishing the labor, tools, supplies, equipment, and incidentals necessary to perform the work.
  2. All losses or damages, except as specified in 107.14, arising from one or more of the following:
    - The nature of the work.
    - The action of the elements.
    - Unforeseen difficulties encountered during prosecution of the work.
  3. All insurance costs, expenses, and risks connected with the prosecution of the work.
  4. All expenses incurred because of an engineer-ordered suspension, except as specified in 104.2.2.3.
  5. All infringements of patents, trademarks, or copyrights.
  6. All other expenses incurred to complete and protect the work under the contract.

### 204.3.2.2.1 General

Correct errata by removing the reference to 490 which was deleted effective with the 2017 spec.

- (1) Under the Removing Pavement bid item, remove concrete pavements, concrete alleys, concrete driveways, or rigid base including all surfaces or other pavements superimposed on them.

### 657.2.2.1.1 General

Correct errata by eliminating the reference to department provided arms in the last sentence.

- (1) Furnish shop drawings as specified in 506.3.2, except submit 5 copies with the materials list. Ensure the drawings contain sufficient detail to allow satisfactory review and show the outside diameters of the pole at the butt, top, and splice locations the plans show. Show the width, depth, length, and thickness of all material, and list pertinent ASTM specification designations and metal alloy designations together with the tensile strength of metallic members. Provide tightening procedures for arm-to-pole connections on the shop drawings.

### 657.2.2.1.4 Poles Designed Under Legacy Standards

Correct errata by deleting the entire subsection to eliminate redundant language.

### 657.2.2.2 Trombone Arms

Correct errata by changing the reference from 657.2.2.1.3 to 657.2.2.1.2.

- (1) Design aluminum trombone arms as specified in 657.2.2.1.2 based on the completed maximum loading configuration the plans show. Furnish shop drawings conforming to 657.2.2.1.1 that show the width, depth, length, and thickness of all members. Also list the ASTM alloy designation and strength of each aluminum member on the shop drawings.

**ADDITIONAL SPECIAL PROVISION 7**

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



## **ADDITIONAL SPECIAL PROVISION 9**

### **Electronic Certified Payroll Submittal**

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

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

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

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

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

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

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

## **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>

**Effective with September 2004 Letting**

**WISCONSIN DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES**

**SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS**

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

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

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

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

Pursuant to Section 103.50 of the Wisconsin Statutes, the prevailing hours of labor have been determined to be up to 10 hours per day and 40 hours per calendar week Monday through Friday. If any laborer, worker, mechanic or truck driver is permitted or required to work more than the prevailing number of hours per day or per calendar week on this contract, they shall be paid for all hours in excess of the prevailing hours at a rate of at least one and one-half (1 1/2) times their hourly rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half: (1) January 1, (2) the last Monday in May, (3) July 4, (4) the first Monday in September, (5) the fourth Thursday in November, (6) December 25, (7) the day before if January 1, July 4 or December 25 falls on a Saturday and (8) the day following if January 1, July 4 or December 25 falls on a Sunday.

All laborers, workers, mechanics and truck drivers shall be paid unconditionally not less often than once a week. Persons who own and operate their own trucks must receive the prevailing truck driver rate for the applicable type of truck (i.e. 2 axle, 3 or more axle, articulated, eculid or dumptor) he or she operates, plus an agreed upon amount for the use of his or her truck. Every owner-operator MUST be paid separately for their driving and for the use of their truck.

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

## **II. PAYROLL REQUIREMENTS**

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

## **III. POSTINGS AT THE SITE OF THE WORK**

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

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

## **IV. WAGE RATE REDISTRIBUTION**

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

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

## **V. ADDITIONAL CLASSIFICATIONS**

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

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

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

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

**ANNUAL PREVAILING WAGE RATE DETERMINATION  
FOR ALL STATE HIGHWAY PROJECTS  
MILWAUKEE COUNTY**

Compiled by the State of Wisconsin - Department of Workforce Development  
for the Department of Transportation  
Pursuant to s. 103.50, Stats.  
Issued on May 1, 2016

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

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

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

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

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

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	31.55	18.52	50.07
Carpenter	34.13	20.71	54.84
Cement Finisher	33.95	19.88	53.83
Future Increase(s): Add \$1.75 on 6/1/16.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Electrician	35.13	23.19	58.32
Future Increase(s): Add \$1.60 on 6/1/16; Add \$1.70 on 6/1/17			
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Fence Erector	35.62	0.00	35.62
Ironworker	30.77	23.72	54.49
Line Constructor (Electrical)	40.81	18.06	58.87
Painter	29.87	18.79	48.66
Pavement Marking Operator	30.27	19.83	50.10
Piledriver	30.11	21.09	51.20
Roofer or Waterproofor	30.40	2.23	32.63
Teledata Technician or Installer	25.63	17.25	42.88
Tuckpointer, Caulker or Cleaner	34.28	18.60	52.88
Underwater Diver (Except on Great Lakes)	36.74	16.00	52.74
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	36.73	15.92	52.65
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	32.65	15.67	48.32
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	28.57	13.71	42.28

<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
	<b>\$</b>	<b>\$</b>	<b>\$</b>
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.53	13.09	39.62
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	22.45	11.84	34.29

**TRUCK DRIVERS**

Single Axle or Two Axle	36.72	21.15	57.87
Three or More Axle	25.78	18.96	44.74
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Articulated, Euclid, Dumptor, Off Road Material Hauler	30.82	21.85	52.67
Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://wisconsin.gov/Pages/doing-bus/civil-rights/labornwage/prevaling-wage-compliance.aspx">http://wisconsin.gov/Pages/doing-bus/civil-rights/labornwage/prevaling-wage-compliance.aspx</a> .			
Pavement Marking Vehicle	23.82	17.72	41.54
Shadow or Pilot Vehicle	25.28	18.31	43.59
Truck Mechanic	25.28	18.31	43.59

**LABORERS**

General Laborer	27.51	20.63	48.14
Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017			
Premium Pay: Add \$.15/hr for air tool operator, joint sawer and filler (pavement), vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add \$.35/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add \$.50/hr for line and grade specialist; Add \$.65/hr for blaster and powderman; Add \$2.01/hr for topman; Add \$2.46/hr for bottomman; Add \$3.23/hr for pipelayer. / DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	19.00	0.00	19.00
Landscaper	27.51	20.63	48.14
Future Increase(s): Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	23.55	20.03	43.58
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.53	0.00	18.53
Railroad Track Laborer	17.00	5.43	22.43

**HEAVY EQUIPMENT OPERATORS**

Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or	38.27	21.85	60.12
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<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/prevailing-wage-compliance.aspx">http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/prevailing-wage-compliance.aspx</a> .			
Backhoe (Track Type) Having a Mfr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/prevailing-wage-compliance.aspx">http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/prevailing-wage-compliance.aspx</a> .	37.77	21.85	59.62
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A- Frames. Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/prevailing-wage-compliance.aspx">http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/prevailing-wage-compliance.aspx</a> .	37.27	21.85	59.12
Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete	37.01	21.85	58.86

<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
	\$	\$	\$
Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/prevaling-wage-compliance.aspx">http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/prevaling-wage-compliance.aspx</a> .			
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: <a href="http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/prevaling-wage-compliance.aspx">http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/prevaling-wage-compliance.aspx</a> .	36.72	21.85	58.57
Fiber Optic Cable Equipment.	21.00	0.00	21.00
Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	41.65	21.71	63.36
Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	41.65	21.71	63.36
Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	36.72	21.15	57.87
Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks-Great Lakes ONLY.	36.72	21.15	57.87

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20161213009PROJECT(S):  
1000-04-70FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

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

SECTION 0001 Category Number 0010

0010	108.4400 CPM Progress Schedule	EACH 1.000	.		.	
0020	201.0120 Clearing	ID 3.000	.		.	
0030	201.0220 Grubbing	ID 3.000	.		.	
0040	203.0100 Removing Small Pipe Culverts	EACH 1.000	.		.	
0050	204.0115 Removing Asphaltic Surface Butt Joints	SY 1,423.000	.		.	
0060	204.0150 Removing Curb & Gutter	LF 1,138.000	.		.	
0070	204.0155 Removing Concrete Sidewalk	SY 251.000	.		.	
0080	204.0170 Removing Fence	LF 1,060.000	.		.	
0090	204.0180 Removing Delineators and Markers	EACH 11.000	.		.	
0100	204.0190 Removing Surface Drains	EACH 1.000	.		.	

## SCHEDULE OF ITEMS

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CONTRACT:  
20161213009PROJECT(S):  
1000-04-70FEDERAL ID(S):  
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CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0110	204.0195 Removing Concrete Bases	2.000 EACH	.		.	
0120	204.0205 Removing Utility Poles	1.000 EACH	.		.	
0130	204.9060.S Removing (item description) 01. APRON ENDWALLS	1.000 EACH	.		.	
0140	204.9060.S Removing (item description) 02. 2-POST BIKE RACK	1.000 EACH	.		.	
0150	204.9060.S Removing (item description) 03. DISCONTINUED PAYPHONE POLE	1.000 EACH	.		.	
0160	204.9060.S Removing (item description) 04. DISCONTINUED PAYPHONE STUB	1.000 EACH	.		.	
0170	204.9060.S Removing (item description) 05. BOLLARD	1.000 EACH	.		.	
0180	205.0100 Excavation Common	2,604.000 CY	.		.	
0190	205.0501.S Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	100.000 TON	.		.	
0200	211.0100 Prepare Foundation for Asphaltic Paving (project) 01. 1000-04-70	LUMP	LUMP		.	

## SCHEDULE OF ITEMS

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0210	213.0100 Finishing Roadway (project) 01. 1000-04-70	1.000 EACH	.		.	
0220	305.0110 Base Aggregate Dense 3/4-Inch	201.000 TON	.		.	
0230	305.0120 Base Aggregate Dense 1 1/4-Inch	3,031.000 TON	.		.	
0240	311.0110 Breaker Run	26.000 TON	.		.	
0250	325.0100 Pulverize and Relay	16,281.000 SY	.		.	
0260	390.0201 Base Patching Asphaltic	25.000 TON	.		.	
0270	415.0080 Concrete Pavement 8-Inch	271.000 SY	.		.	
0280	416.0180 Concrete Driveway 8-Inch	125.000 SY	.		.	
0290	416.0610 Drilled Tie Bars	37.000 EACH	.		.	
0300	416.1010 Concrete Surface Drains	6.000 CY	.		.	
0310	416.1725 Concrete Pavement Replacement SHES	206.000 SY	.		.	

## SCHEDULE OF ITEMS

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CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0320	455.0605 Tack Coat	2,271.000 GAL	.		.	
0330	460.5223 HMA Pavement 3 LT 58-28 S	680.800 TON	.		.	
0340	460.5224 HMA Pavement 4 LT 58-28 S	5,947.600 TON	.		.	
0350	465.0315 Asphaltic Flumes	29.000 SY	.		.	
0360	521.0118 Culvert Pipe Corrugated Steel 18-Inch	12.000 LF	.		.	
0370	521.1018 Apron Endwalls for Culvert Pipe Steel 18-Inch	2.000 EACH	.		.	
0380	522.1015 Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	1.000 EACH	.		.	
0390	523.0414 Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 14x23-Inch	90.000 LF	.		.	
0400	523.0514 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch	4.000 EACH	.		.	
0410	601.0150 Concrete Curb Integral Type D	541.000 LF	.		.	

## SCHEDULE OF ITEMS

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CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0420	601.0407 Concrete Curb & Gutter 18-Inch Type D	48.000 LF	.		.	
0430	601.0411 Concrete Curb & Gutter 30-Inch Type D	804.000 LF	.		.	
0440	602.0410 Concrete Sidewalk 5-Inch	7,273.000 SF	.		.	
0450	602.0505 Curb Ramp Detectable Warning Field Yellow	104.000 SF	.		.	
0460	606.0100 Riprap Light	12.000 CY	.		.	
0470	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	23.500 LF	.		.	
0480	611.0430 Reconstructing Inlets	1.000 EACH	.		.	
0490	611.0645 Inlet Covers Type MS-A	1.000 EACH	.		.	
0500	611.3901 Inlets Median 1 Grate	1.000 EACH	.		.	
0510	611.8115 Adjusting Inlet Covers	2.000 EACH	.		.	
0520	612.0104 Pipe Underdrain 4-Inch	778.000 LF	.		.	

## SCHEDULE OF ITEMS

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N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0530	612.0804 Apron Endwalls for Underdrain Reinforced Concrete 4-Inch	2.000 EACH	.		.	
0540	616.0100 Fence Woven Wire (height) 01. 4-FT	58.000 LF	.		.	
0550	616.0206 Fence Chain Link 6-FT	889.000 LF	.		.	
0560	619.1000 Mobilization	1.000 EACH	.		.	
0570	620.0300 Concrete Median Sloped Nose	30.000 SF	.		.	
0580	625.0100 Topsoil	6,928.000 SY	.		.	
0590	628.1104 Erosion Bales	50.000 EACH	.		.	
0600	628.1504 Silt Fence	2,726.000 LF	.		.	
0610	628.1520 Silt Fence Maintenance	2,181.000 LF	.		.	
0620	628.1905 Mobilizations Erosion Control	7.000 EACH	.		.	

## Wisconsin Department of Transportation

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DATE: 09/16/16

## SCHEDULE OF ITEMS

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N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0630	628.1910 Mobilizations Emergency Erosion Control	7.000 EACH	.		.	
0640	628.2006 Erosion Mat Urban Class I Type A	6,928.000 SY	.		.	
0650	628.7010 Inlet Protection Type B	3.000 EACH	.		.	
0660	628.7015 Inlet Protection Type C	16.000 EACH	.		.	
0670	628.7504 Temporary Ditch Checks	120.000 LF	.		.	
0680	628.7555 Culvert Pipe Checks	24.000 EACH	.		.	
0690	628.7570 Rock Bags	54.000 EACH	.		.	
0700	629.0210 Fertilizer Type B	4.000 CWT	.		.	
0710	630.0130 Seeding Mixture No. 30	124.000 LB	.		.	
0720	633.0200 Delineators Flexible	11.000 EACH	.		.	
0730	634.0618 Posts Wood 4x6-Inch X 18-FT	185.000 EACH	.		.	

## SCHEDULE OF ITEMS

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N/A

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0740	634.0816 Posts Tubular Steel 2x2-Inch X 16-FT	32.000 EACH	.		.	
0750	635.0200 Sign Supports Structural Steel HS	1,000.000 LB	.		.	
0760	635.0300 Sign Supports Replacing Base Connection Bolts	6.000 EACH	.		.	
0770	636.0100 Sign Supports Concrete Masonry	1.600 CY	.		.	
0780	636.0500 Sign Supports Steel Reinforcement	98.000 LB	.		.	
0790	637.1220 Signs Type I Reflective SH	600.000 SF	.		.	
0800	637.2210 Signs Type II Reflective H	1,030.820 SF	.		.	
0810	637.2215 Signs Type II Reflective H Folding	10.000 SF	.		.	
0820	637.2230 Signs Type II Reflective F	16.000 SF	.		.	
0830	638.2101 Moving Signs Type I	1.000 EACH	.		.	
0840	638.2102 Moving Signs Type II	5.000 EACH	.		.	

## SCHEDULE OF ITEMS

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N/A

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0850	638.2601 Removing Signs Type I	6.000 EACH	.		.	
0860	638.2602 Removing Signs Type II	173.000 EACH	.		.	
0870	638.3000 Removing Small Sign Supports	162.000 EACH	.		.	
0880	638.3100 Removing Structural Steel Sign Supports	2.000 EACH	.		.	
0890	642.5001 Field Office Type B	1.000 EACH	.		.	
0900	643.0100 Traffic Control (project) 01. 1000-04-70	1.000 EACH	.		.	
0910	643.0300 Traffic Control Drums	5,248.000 DAY	.		.	
0920	643.0410 Traffic Control Barricades Type II	668.000 DAY	.		.	
0930	643.0420 Traffic Control Barricades Type III	2,316.000 DAY	.		.	
0940	643.0715 Traffic Control Warning Lights Type C	45.000 DAY	.		.	
0950	643.0800 Traffic Control Arrow Boards	2.000 DAY	.		.	

## SCHEDULE OF ITEMS

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1000-04-70FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0960	643.0900 Traffic Control Signs	1,243.000 DAY	.		.	
0970	643.0910 Traffic Control Covering Signs Type I	5.000 EACH	.		.	
0980	643.0920 Traffic Control Covering Signs Type II	23.000 EACH	.		.	
0990	643.1050 Traffic Control Signs PCMS	338.000 DAY	.		.	
1000	644.1616.S Temporary Pedestrian Safety Fence	1,199.000 LF	.		.	
1010	645.0130 Geotextile Type R	75.000 SY	.		.	
1020	646.0106 Pavement Marking Epoxy 4-Inch	2,262.000 LF	.		.	
1030	646.0126 Pavement Marking Epoxy 8-Inch	672.000 LF	.		.	
1040	646.0600 Removing Pavement Markings	602.000 LF	.		.	
1050	647.0156 Pavement Marking Arrows Epoxy Type 1	45.000 EACH	.		.	
1060	647.0166 Pavement Marking Arrows Epoxy Type 2	12.000 EACH	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:

PROJECT(S):

FEDERAL ID(S):

20161213009

1000-04-70

N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1070	647.0256 Pavement Marking Symbols Epoxy	71.000 EACH	.		.	
1080	647.0356 Pavement Marking Words Epoxy	8.000 EACH	.		.	
1090	647.0456 Pavement Marking Curb Epoxy	2,616.000 LF	.		.	
1100	647.0506 Pavement Marking Curb Ramp Epoxy	140.000 LF	.		.	
1110	647.0566 Pavement Marking Stop Line Epoxy 18-Inch	401.000 LF	.		.	
1120	647.0606 Pavement Marking Island Nose Epoxy	8.000 EACH	.		.	
1130	647.0656 Pavement Marking Parking Stall Epoxy	64,014.000 LF	.		.	
1140	647.0766 Pavement Marking Crosswalk Epoxy 6-Inch	152.000 LF	.		.	
1150	647.0955 Removing Pavement Markings Arrows	2.000 EACH	.		.	
1160	647.0960 Removing Pavement Markings Symbols	32.000 EACH	.		.	
1170	650.4000 Construction Staking Storm Sewer	1.000 EACH	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20161213009PROJECT(S):  
1000-04-70FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1180	650.6000 Construction Staking Pipe Culverts	2.000 EACH	.		.	
1190	650.8500 Construction Staking Electrical Installations (project) 01. 1000-04-70	LUMP	LUMP		.	
1200	650.9910 Construction Staking Supplemental Control (project) 01. 1000-04-70	LUMP	LUMP		.	
1210	650.9920 Construction Staking Slope Stakes	1,669.000 LF	.		.	
1220	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	1,165.000 LF	.		.	
1230	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	140.000 LF	.		.	
1240	652.0800 Conduit Loop Detector	142.000 LF	.		.	
1250	653.0135 Pull Boxes Steel 24x36-Inch	1.000 EACH	.		.	
1260	653.0140 Pull Boxes Steel 24x42-Inch	5.000 EACH	.		.	
1270	653.0905 Removing Pull Boxes	4.000 EACH	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20161213009PROJECT(S):  
1000-04-70FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1280	654.0105 Concrete Bases Type 5	2.000 EACH	.		.	
1290	654.0230 Concrete Control Cabinet Bases Type L30	1.000 EACH	.		.	
1300	655.0610 Electrical Wire Lighting 12 AWG	882.000 LF	.		.	
1310	655.0620 Electrical Wire Lighting 8 AWG	1,210.000 LF	.		.	
1320	655.0625 Electrical Wire Lighting 6 AWG	3,315.000 LF	.		.	
1330	655.0640 Electrical Wire Lighting 1 AWG	18.000 LF	.		.	
1340	655.0700 Loop Detector Lead In Cable	261.000 LF	.		.	
1350	655.0800 Loop Detector Wire	284.000 LF	.		.	
1360	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. HL-66-KW	LUMP	LUMP		.	
1370	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	2.000 EACH	.		.	
1380	657.0322 Poles Type 5-Aluminum	7.000 EACH	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20161213009PROJECT(S):  
1000-04-70FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1390	657.0610 Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	7.000 EACH	.		.	
1400	659.1125 Luminaires Utility LED C	43.000 EACH	.		.	
1410	659.2230 Lighting Control Cabinets 240/480 30-Inch	1.000 EACH	.		.	
1420	690.0150 Sawing Asphalt	2,304.000 LF	.		.	
1430	690.0250 Sawing Concrete	270.000 LF	.		.	
1440	SPV.0060 Special 01. SALVAGING BUS SHELTER	3.000 EACH	.		.	
1450	SPV.0060 Special 02. SALVAGING BICYCLE LOCKER	3.000 EACH	.		.	
1460	SPV.0060 Special 03. CLEANING INLETS	2.000 EACH	.		.	
1470	SPV.0060 Special 04. CONNECTING PIPE UNDERDRAIN 4-INCH TO EXISTING INLET	3.000 EACH	.		.	
1480	SPV.0060 Special 11. REMOVING LUMINAIRES	43.000 EACH	.		.	

## SCHEDULE OF ITEMS

REVISED:

CONTRACT:  
20161213009PROJECT(S):  
1000-04-70FEDERAL ID(S):  
N/A

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1490	SPV.0060 Special 12. LAMP DISPOSAL HIGH INTENSITY DISCHARGE	43.000 EACH	.		.	
1500	SPV.0060 Special 13. CONCRETE BASES TYPE 5 SPECIAL	5.000 EACH	.		.	
1510	SPV.0060 Special 14. POST TOP LUMINAIRES UTILITY LED	7.000 EACH	.		.	
1520	SPV.0105 Special 01. REMOVE LOOP DETECTOR WIRE AND LEAD-IN CABLE IH 94 WB OFF RAMP & CTH Y	LUMP	LUMP		.	
1530	SPV.0105 Special 11. LIGHTING SYSTEM SURVEY	LUMP	LUMP		.	
1540	SPV.0165 Special 01. CONSTRUCTION STAKING SIDEWALK	5,370.000 SF	.		.	
1550	SPV.0180 Special 01. CONSTRUCTION STAKING PARKING LOTS SUBGRADE	4,787.000 SY	.		.	
1560	SPV.0180 Special 02. CONSTRUCTION STAKING PARKING LOTS BASE	21,284.000 SY	.		.	
1570	SPV.0180 Special 03. CONSTRUCTION STAKING PARKING LOTS CONCRETE PAVEMENT & DRIVEWAYS	332.000 SY	.		.	
1580	SPV.0180 Special 04. RESIN BINDER HIGH FRICTION SURFACE TREATMENT	483.000 SY	.		.	
	SECTION 0001 TOTAL				.	
	TOTAL BID				.	



**PLEASE ATTACH SCHEDULE OF ITEMS HERE**