HIGHWAY WORK PROPOSAL

Proposal Number:

Wisconsin Department of Transportation

DT1502 10/2010 s.66.29(7) Wis. Stats. STATE PROJECT ID COUNTY

FEDERAL PROJECT ID

PROJECT DESCRIPTION

HIGHWAY

Milwaukee and

3700-20-74

Waukesha

Replace Existing Signals, Milwaukee/Waukesha Various Locations

Various Highways

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	Attach Proposal Guaranty on back of this PAGE.
Payable to: Wisconsin Department of Transportation	
Bid Submittal Due	Firm Name, Address, City, State, Zip Code
Date: May 12, 2015 Time (Local Time): 9:00 AM	SAMPLE
Contract Completion Time	NOT FOR BIDDING PURPOSES
Eighty (80) Working Days	NOT FOR BIDDING FOR OSES
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)	(Bidder Signature)	
(Print or Type Name, Notary Public, State Wisconsin)	(Print or Type Bidder Name)	
(Date Commission Expires) Notary Seal	(Bidder Title)	

For Department Use Only

Removing asphaltic surface; removing curb and gutter; asphaltic surface; base patching concrete; concrete curb and gutter; base aggregate dense, concrete sidewalk; storm sewer modifications; traffic signal replacements.

Notice of Award Dated

Date Guaranty Returned

PLEASE ATTACH PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2007 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

- Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:
 - 1. Electronic bid on the internet.
 - 2. Electronic bid on a printout with accompanying diskette or CD ROM.
 - 3. Paper bid under a waiver of the electronic submittal requirements.
- (2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.
- (3) The department will provide bidding information through the department's web site at http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm. The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 P.M. local time on the Thursday before the letting. Check the department's web site after 5:00 P.M. local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid Express™ on-line bidding exchange at http://www.bidx.com/ after 5:00 P.M. local time on the Thursday before the letting to ensure that the latest schedule of items Expedite file (*.ebs or *.00x) is used to submit the final bid.
- (4) Interested parties can subscribe to the Bid Express™ on-line bidding exchange by following the instructions provided at the www.bidx.com web site or by contacting:

Info Tech Inc. 5700 SW 34th Street, Suite 1235 Gainesville, FL 32608-5371

email: mailto:customer.support@bidx.com

- (5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.
- (6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, Room 601, 4802 Sheboygan Avenue, Madison, WI, during regular business hours.

B Submitting Electronic Bids

B.1 On the Internet

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

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

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

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

Bidder Name

BN00

Proposals: 1, 12, 14, & 22

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

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

C Waiver of Electronic Submittal

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

Notary Seal Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

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

Name of Subcontractor	Class of Work	Estimated Value
-		

DECEMBER 2000

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

Instructions for Certification

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

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

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

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

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

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 3700-20-74, Replace Existing Signals, Milwaukee/Waukesha, Various Locations, along Various Highways in Milwaukee and Waukesha Counties, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2015 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system. 100-005 (20141107)

2. Scope of Work.

The work under this contract shall consist of removing asphaltic surface; removing curb and gutter; asphaltic surface; base patching concrete; concrete curb and gutter; base aggregate dense, concrete sidewalk; culvert pipes, manholes, traffic signal replacements; and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

3. Prosecution and Progress.

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

Provide the time frame for construction of the project within the 2015 construction season to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure that the time frame is consistent with the contract completion time. Upon approval, the engineer will issue the notice to proceed within 10 calendar days before the beginning of the approved time frame.

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

Upon commencement of work at an intersection, complete the work at that intersection within 40 working days. This applies to STH 59/164 and Sunset Drive, STH 59/164 and CTH D/Broadway, STH 83 and CTH ES, and STH 100/Brown Deer Road and 76th Street.

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If the contractor fails to complete the work at each of the intersections noted above within 40 working days of commencing work at that intersection, the department will assess the contractor \$1,320 in interim liquidated damages per intersection for each working day contract work remains incomplete beyond 40 working days. An entire working day will be charged for any period of time within a working day that the work at each intersection remains incomplete beyond 12:01 AM.

Upon commencement of work at STH 100/Ryan Road and 76^{th} Street, complete work within 45 working days.

If the contractor fails to complete the work at STH 100/Ryan Road and 76th Street within 45 working days of commencing work, the department will assess the contractor \$1,320 in interim liquidated damages for each working day contract work remains incomplete beyond 45 working days. An entire working day will be charged for any period of time within a working day that the work remains incomplete beyond 12:01 AM.

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

Construction operations at the STH 59/164 intersection with CTH D/Broadway shall not commence until 60 calendar days from date of notice to proceed.

4. Traffic.

Maintain emergency and local vehicular access at all times to all roadways and driveways within the project limits.

Peak Travel Times are defined as follows:

6:00 AM to 9:00 AM 3:00 PM to 6:00 PM

Nighttime Hours are defined as follows:

10:00 PM to 5:00 AM

Shoulder closures are allowed at any time and shall be properly implemented per the standard detail drawings and contract specifications.

Turn lane closures and single through travel lane closures are allowed except during peak travel times as described above. Close no more than one traffic lane at each approach at one time.

WIS 100 (Brown Deer Road) double through lane and turn lane closures for base patching of the traffic signal loops are allowed only during the nighttime hours as defined above. Advance lane closure signing (PCMS) shall also be included to notify traffic of the WIS 100 (Brown Deer Road) lane closures. PCMS messages are to be approved by the engineer.

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Full, rolling closures to install overhead traffic signal arms are only allowed during the nighttime hours defined above. Contact local law enforcement for assistance with traffic control a minimum of seven days prior to the required closure.

Re-open lanes to traffic immediately upon completion of the construction operations that require their closure.

5. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 59, STH 164, STH 100, STH 181, or STH 83 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

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

107-005 (20050502)

6. Utilities.

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

There are underground and overhead utility facilities located throughout the project limits. Coordinate 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. Use caution to ensure the integrity of underground facilities and maintain code clearances from overhead facilities at all times.

One utility conflict has been identified at the STH 100 (Ryan Road) and S. 76th Street intersection. Bidders are advised to contact each utility company listed in the plans prior to preparing their bids to obtain current information on the location of utility facilities.

WE Energies Electric will be removing municipal street lighting arms and service at the STH 83 intersection with CTH ES prior to the start of construction. Contact Bryan Stoehr at WE Energies at (414) 944-5516 with any questions regarding the removal work.

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WE Energies Gas Operations has requested a utility watchdog at the STH 83 intersection with CTH ES. Contact LaTroy Brumfield at WE Energies (414) 221-5617 or latroy.brumfield@we-energies.com at least five working days in advance of working in the area to make arrangements.

The **City of Franklin** has water valve boxes at the STH 100 (Ryan Road) and S. 76th Street intersection that will be adjusted during construction by city forces. Coordinate this work by contacting the city seven days in advance of needing the adjustments. Contact the City of Franklin Water and Sewer Department at (414) 421-2581.

Known utilities on the project at the select intersections are as follows:

WIS 100 (W. Brown Deer Road) and WIS 181 (N. 76th Street)

AT&T Wisconsin

Time Warner Cable

American Transmission Company (ATC)

We Energies – Gas Operations

We Energies – Electric

WisDOT Lighting

WisDOT STOC

City of Milwaukee

Milwaukee Metropolitan Sewage District (MMSD)

Level 3 Communications

WIS 100 (W. Ryan Road) and S. 76^{th} Street

AT&T Wisconsin

Time Warner Cable

American Transmission Company (ATC)

We Energies – Gas Operations

We Energies - Electric

WisDOT Lighting

City of Franklin

WIS 83 (N. Rochester Street) and CTH ES (Fox Street)

Time Warner Cable

CenturyLink

We Energies – Gas Operations

We Energies – Electric

WisDOT Lighting

Village of Mukwonago

WIS 59 (Les Paul Parkway) and Sunset Drive

AT&T Wisconsin

Time Warner Cable

Windstream KDL

American Transmission Company (ATC)

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We Energies – Gas Operations
We Energies – Electric
WisDOT Lighting
WisDOT STOC
AT&T Corp.
City of Waukesha
Waukesha Water Utility

WIS 59 (Les Paul Parkway) and CTH D (E. Broadway Street)

AT&T Wisconsin
Time Warner Cable
Windstream KDL
American Transmission Company (ATC)
Midwest Fiber Networks
We Energies – Gas Operations
We Energies – Electric
WisDOT Lighting
WisDOT STOC
AT&T Corp.
TDS Metrocom
Waukesha Water Utility

7. Other Contracts.

There are two other construction projects in the area that may run concurrently with this project. Coordinate schedules with the other projects to minimize disruption. Project descriptions and contacts are as follows:

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STH 59/164 Water Main Reconstruction (E. Broadway to Arcadian Avenue)
Waukesha Water Utility
Project contact:
Paul Arend, P.E.
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R.A. Smith National, Inc. (262) 317-3380 paul.arend@rasmithnational.com

STH 59/164 Fiber Optic Interconnect (CTH X to Moreland Blvd) WisDOT

Project contact:

Joyce Murphy, P.E. WisDOT Signal Operations (262) 548-5933 joyce.murphy@dot.wi.gov

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8. Erosion Control.

Prepare and submit an erosion control implementation plan (ECIP) for the project including borrow sites, material disposal sites, dust control, and dewatering in accordance 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 will 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 Liaison (Craig Webster, (262) 574-2141, in Waukesha County or Kristina Betzold, (414) 263-8517, in Milwaukee County). 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.

Re-topsoil graded areas, as designated by the engineer, immediately after grading is completed within those areas. Seed, fertilize, and mulch/erosion mat or sod 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.

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.

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.

9. Public Convenience and Safety.

Revise standard spec 107.8(6) as follows:

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

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10. QMP Base Aggregate.

A Description

A.1 General

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

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

A.2 Contractor Testing for Small Quantities

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

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

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

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

B Materials

B.1 Quality Control Plan

- (1) Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not place base before the engineer reviews and comments on the plan. Construct the project as that plan provides.
- 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.

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

B.2 Personnel

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

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

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

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

B.3 Laboratory

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

Materials Management Section

3502 Kinsman Blvd. Madison, WI 53704

Telephone: (608) 246-5388

http://www.dot.state.wi.us/business/engrserv/lab-qualification.htm

B.4 Quality Control Documentation

B.4.1 General

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

B.4.2 Records

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

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

B.4.3 Control Charts

- (1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.
- Provide control charts to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:
 - 1. Contractor individual QC tests.
 - 2. Department 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.

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(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 7	Ր 27
Material finer than the No. 200 sieve.	AASHTO T	۲ 1 1

- (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

- 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.

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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

- Do not blend additional material on the roadbed to correct gradation problems.
- 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

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department will provide the contractor with a listing of names and telephone numbers of all QV and IA personnel for the project, and provide test results to the contractor within 2 business days after the department obtains the sample.

B.8.2 Verification Testing **B.8.2.1** General

- (1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.
- (2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:
 - 1. One non-random test on the first day of placement.
 - 2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.
- (3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting; except, for 3-inch aggregates, the department will collect samples from the stockpile at load-out. The department will split each sample, test half for QV, and retain half.
- (4) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.
- 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.

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

B.9 Dispute Resolution

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

C (Vacant)

D (Vacant)

E Payment

- (1) Costs for all sampling, testing, and documentation required under this special provision are incidental to this work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the non-performance of QMP administrative item.
- (2) For material represented by a running average exceeding a control limit, the department will reduce pay by 10 percent of the contract price for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.

301-010 (20100709)

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11. Notice to Contractor – Traffic Signal Equipment Lead Time.

Order traffic signal equipment as soon as possible to assure the equipment is procured in a timely fashion and, therefore, installed, inspected, and ready for turn-on at the required date.

12. Traffic Signals, General.

All work shall be in accordance to the plans, the standard specifications, and these special provisions.

Note that failure to comply with the state standards and specifications may result in the cost of the corrections to be made at the contractors expense. Also, any additional disruption of department-owned facilities shall be repaired or relocated as needed at the contractor's expense.

Notify the department's Electrical Field Unit at (414) 266-1170 at lease three weeks prior to the beginning of the traffic signal work.

Furnish the engineer with material lists and specifications of all traffic control equipment for approval prior to installation.

13. General Requirements for Electrical Work.

Add the following to standard spec 651.3.3 (3):

Requests for signal inspection shall include a completed SE Region Traffic Signal Checklist.

14. Section Corner Monument Ties.

Coordinate with Southeastern Wisconsin Regional Planning Commission (SEWRPC) for the perpetuation and replacement of section corner (Public Land Survey System- PLSS) ties at the intersection of STH 100 (Ryan Road) and S. 76th Street.

SEWRPC will perpetuate existing section corner ties. The contractor is responsible to coordinate with SEWRPC and the WisDOT Project Manager throughout the perpetuation and replacement process. The engineer will contact SEWRPC at (262) 953-4295 at least two weeks before starting construction operations or the preconstruction meeting to allow for section corner tie perpetuation.

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Contact Information:

Attn: John Washburn

Southeastern Wisconsin Regional Planning Commission

W239 N1812 Rockwood Drive

P.O. Box 1607

Waukesha, WI 53187-1607 Phone: (262) 953-4295 Fax: (262) 547-1103

E-mail: jwashburn@sewrpc.org

15. Removing Concrete Bases, Item 204.0195.

Add the following to standard spec 204.3.2.1 (2):

At locations of concrete bases where complete removal of the base will impact existing curb ramps or sidewalk, break down and remove the concrete material to a depth of 2' below grade. Fill the area to grade with similar material as adjacent to the base (topsoil/seed, concrete sidewalk, asphalt, etc). Repair any damage to curb ramps caused by the removal process to match pre-construction conditions. No additional payment will be made for repair to areas damaged by the contractor's operations.

16. Removing Inlets, Item 204.0220.

Supplement standard spec 204.3.2.2 (11) with the following:

Cut-off the top of the inlet structure to an elevation approximately 12" below finished grade. Provide a 6" thick (minimum) precast flat slab reinforced concrete top and place on top of the cut-off structure in accordance with Section 611 of the standard specifications. Place the flat slab concrete top a minimum of 6" below finished grade.

Supplement standard spec 204.5.1 (2) with the following:

Payment for Removing Inlets includes cutting the top of structure to the grade required, for providing and installing a precast flat slab reinforced concrete top, and for maintaining existing live sewer connections.

17. 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 bioremediation of petroleum contaminated soil at a DNR licensed facility. The closest DNR licensed landfill facilities that can bioremediate this soil once excavated are:

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Waste Management Metro Landfill 10712 South 124th Street Franklin, WI 53132 (414) 529-6180

Advanced Disposal Emerald Park Landfill W124S10629 South 124th Street Muskego, WI 53150 (414) 529-1360

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 – Contaminated Soil and Groundwater Location

The department and others completed testing for soil and groundwater contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil and arsenic-contaminated groundwater is present at the following locations as shown on the plans:

- Station 124+10 to 124+65 (STH 100 (Ryan Road) and S. 76th Street) from approximately 30 feet to 70 feet right of reference line, from approximately 0 to 16 feet bgs. Soil at this location is contaminated with petroleum. Approximately 60 cubic yards (approximately 100 tons at an estimated 1.7 tons per cubic yard) of contaminated soil will be excavated here for traffic light monotube bases.
- Station 124+20 to 124+70 (STH 100 (Ryan Road) and S. 76th Street) from approximately 20 feet to 65 feet left of reference line, from approximately 0 to 16 feet bgs. Soil at this location is contaminated with petroleum. Approximately 60 cubic yards (approximately 100 tons at an estimated 1.7 tons per cubic yard) of contaminated soil will be excavated here for a traffic light monotube base. Groundwater is present at a depth of approximately 5 feet bgs and is contaminated with arsenic.

Directly load soil excavated by the project at the above locations into trucks that will transport the soil to a WDNR-licensed bioremediation facility.

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer.

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

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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 to Section C below.

A.3 Excavation Management Plan

The excavation management plan for this project has been designed to minimize the offsite bioremediation of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding previous investigation and remediation activities in these areas 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

A.4 Coordination

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. Phone: (262) 901-2126 Fax: (262) 879-1220

E-mail: <u>bbergmann@trcsolutions.com</u>

The role of the environmental consultant 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 bioremediation of contaminated soil from the bioremediation facility.

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Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least 3 calendar days prior to commencement of excavation activities in each of the contaminated areas.

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 licensed bioremediation facility that will be used for bioremediation 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 from the bioremediation facility for bioremediation of contaminated soils. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

A.5 Health and Safety Requirements

Supplement standard spec 107.1 with the following:

During excavation activities, 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

Supplement standard spec 205.3 with the following:

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

The environmental consultant will periodically monitor soil excavated from the contaminated areas. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous

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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.

Directly load and haul soils designated by the environmental consultant for offsite disposal 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 disposal 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 compounds and/or metals. Such water will require appropriate handling and disposal and may, with approval of the City of Franklin and 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 Ton Contaminated Soil

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Payment is full compensation for excavating, segregating, loading, hauling, and disposal 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. No additional payment will be made for tipping fees associated with the disposal of contaminated soil.

18. Base Patching Concrete SHES, Item 390.0403.

Replace standard spec 416.2.5.1 (1) with the following:

For the concrete mixture, use a minimum of 846 pounds of cementitious material per cubic yard of concrete. Determine materials and proportions of the concrete mixture to obtain a minimum compressive strength in concrete of 3000 psi in time to reopen the roadway to traffic by 5:00 AM. The contractor may add one of a combination of admixtures to the ingredients of the mixture in order to obtain the required minimum strength and required air content. Do not re-temper the concrete mixture.

19. Inlets Median 2 Grate, Item 611.3902.

Supplement standard spec 611.3.2 with the following:

Saw cut the existing 36" corrugated metal pipe (CMP) and maintain existing pipe invert elevations for connecting to Inlets Median 2 Grate.

Supplement standard spec 611.5.2 with the following:

Payment for cutting existing 36" CMP and making the storm sewer connections is incidental to Inlets Median 2 Grate.

20. Traffic Control.

Supplement standard spec 643.3.1 with the following:

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

Provide the Waukesha and Milwaukee County Sheriffs' Departments, Village of Mukwonago Police Department, City of Franklin Police Department, City of Milwaukee Police Department, City of Waukesha Police Department, and the engineer a current telephone number with which the contractor or his representative can be contacted during non-working hours in the event a safety hazard develops.

Do not park or store equipment, vehicles or construction materials within 18 feet of the edge of traveled way on any roadway carrying traffic during non-working hours except at locations and periods of time approved by the engineer.

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Equip all contractor's vehicles or equipment operating in the live traffic lanes with a hazard identification beam (flashing yellow signal light). Operate the flashing yellow beam only when merging or exiting live traffic lanes or when parked or operating on shoulders.

All construction vehicles and equipment operating on or near roadways shall be equipped with at least one flashing amber light. The flashing amber light shall be activated when vehicles or equipment are operated on the roadway, parked in close proximity to the roadway, and when entering or exiting live lanes of traffic. The flashing amber light shall be mounted approximately midway between the transverse extremities of the vehicles or machinery and at the highest practical point that provides visibility from all directions. The light shall be of the flashing strobe or revolving type meeting the following minimum requirements:

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

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

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

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

Replace standard spec 643.3.1(6) with the following:

Provide 24-hour a day availability of equipment, forces and materials to promptly restore barricades, lights, or other traffic control devices that are damaged or disturbed. Restore any barricade, light or other traffic control so that the device is not out of service for more than 12 hours.

21. Install Conduit Into Existing Item, Item 652.0700.S.

A Description

This special provision describes installing proposed conduit into an existing manhole, pull box, junction box, communication vault, or other structure.

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B Materials

Use nonmetallic conduit, as provided and paid for under other items in this contract. Furnish backfill material, topsoil, fertilizer, seed, and mulch conforming to the requirements of pertinent provisions of the standard specifications.

C Construction

Expose the outside of the existing structure without disturbing existing conduits or cabling. Drill the appropriate sized hole for the entering conduit(s) at a location within the structure without disturbing the existing cabling and without hindering the installation of new cabling within the installed conduit. Fill void area between the drilled hole and conduit with an engineer-approved filling material to protect against conduit movement and entry of fill material into the structure. Tamp backfill into place.

D Measurement

The department will measure Install Conduit Into Existing System by the unit, acceptably installed. Up to five conduits entering a structure per entry point into the existing structure will be considered a single unit. Conduits in excess of five, or conduits entering at significantly different entry points into the existing pull box, manhole, or junction box will constitute multiple units of payment.

E Payment

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

ITEM NUMBERDESCRIPTIONUNIT652.0700.SInstall Conduit Into Existing ItemEach

Payment is full compensation for excavating, drilling holes; furnishing and installing all materials, including bricks, coarse aggregate, sand, bedding, and backfill; for excavating and backfilling; and for furnishing and placing topsoil, fertilizer, seed, and mulch in disturbed areas; for properly disposing of surplus materials; and for making inspections. 652-070 (20100709)

22. Electrical Service Meter Breaker Pedestal STH 59 and CTH D, Item 656.0200.01; STH 59 and Sunset Dr, Item 656.0200.02; STH 83 and CTH ES, Item 656.0200.03; STH 100/Brown Deer Rd and STH 181 Ramps, Item 656.0200.04; STH 100/Ryan Rd and 76th Street, Item 656.0200.05.

Append standard spec 656.2.3 with the following:

The department will be responsible for the electric service installation request for any department maintained facility.

Electric utility company service installation and energy cost will be billed to and paid for by the maintaining authority.

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Append standard spec 656.3.4 with the following:

Install the cabinet base and meter breaker pedestal first, so the electric utility company can install the service lateral. Finish grade the service trench, replace topsoil that is lost or contaminated with other materials, fertilize, seed, and mulch all areas that are disturbed by the electric utility company.

Append standard spec 656.5(3) with the following:

Payment for grading the service trench, replacing topsoil, fertilizer, seed, and mulch will be incidental to this work unless the bid items are in the contract and then they will be paid for at the contract price.

23. Traffic Signal Mounting Hardware.

Replace standard spec 658.2.1 (2) with the following:

Use an approved type of pole or standard vertical mounting brackets/clamps for signal faces from an approved manufacturer. Pedestrian traffic signal heads mounted in the median shall use federal yellow aluminum side of pole 2-way upper and lower arm assemblies providing 16 ½-inch center to center spacing.

24. Pedestrian Signal Face 16-Inch.

Append standard spec 658.2.3.2(1) with the following:

Furnish 16 inch LED ready pedestrian signal housing, drilled for top/bottom pipe mount with the ability to rotate 270 degrees on poly mounting bracket.

Append standard spec 658.3.4 with the following:

Connect all ungrounded conductors with wire nuts in the appropriate sections of the signal heads. Connect the neutral conductors to the terminal strip. Be certain to twist wires prior to installing the wire nuts. All wire nuts must be installed facing up to prevent the entrance of water.

25. Pedestrian Push Buttons.

Append standard spec 658.2.5 with the following:

Furnish vandal resistant, pressure activated, pedestrian push buttons, with die cast body type, in unfinished aluminum or yellow. Button constructed shall be constructed of stainless steel, with a Piezo driven solid state switch and beeper that sounds simultaneously with button push.

Furnish low profile, unfinished cast aluminum, vandal resistant, and flush mounting pole mount.

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Place a Size 1, Type H reflective (R10-3EL, R, D) sign sticker (per state sign plate), message series – B, directly above each push button. Include a directional arrow or arrows on the sign as the plans show.

26. Traffic Signal Faces.

Append standard spec 658.3.2 with the following:

Connect all ungrounded conductors with wire nuts in the appropriate sections of the signal heads. Connect the neutral conductors to the terminal strip. Be certain to twist wires prior to installing the wire nuts. All wire nuts must be installed facing up to prevent the entrance of water.

27. Temporary Traffic Signals for Intersections STH 59 and CTH D, Item 661.0200.01; STH 59 and Sunset Dr, Item 661.0200.02; STH 83 and CTH ES, Item 661.0200.03; STH 100/Brown Deer Rd and STH 181 SB Ramps, Item 661.0200.04; STH 100/Brown Deer Rd and STH 181 NB Ramps, Item 661.0200.05; STH 100/Ryan Rd and 76th Street, Item 656.0200.06.

Append standard spec 661.2.1 with the following:

- (1) Furnish all temporary traffic signal equipment as shown on the plan. As applicable, the signal controller shall be capable of operating with a non-intrusive detection system and/or Emergency Vehicle Preemption (EVP) system. All wood poles shall be plumb and level. Provide primary and secondary temporary traffic signal contact names and phone numbers who will be responsible for implementing temporary traffic signal timing changes. The department may request traffic signal timing changes to an approved timing plan during the project. Implement any approved timing plan change within 24 hours upon notification of the change. Record the times of operation of the timing change and provide this information to the department.
- (6) Furnish pedestrian signal faces as shown in the plans, in accordance to standard spec 658.2.3.
- (7) Furnish pedestrian push buttons as shown in the plans, in accordance to standard spec 658.2.5.

Append standard spec 661.3.1 with the following:

(4) Install non-intrusive detection units according to the manufacturer's recommendations. Install power cable and signal cabinet equipment. Aim the detection units to provide detection at the locations shown on the plans and make the detection system fully operational.

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- (5) In the event, at installation or turn on date, a noticeable obstruction is present in line with the detection zone(s), advise the engineer before setting the zone.
- (6) The non-intrusive detection shall be mounted at a location per the manufacturer's recommendations. Relocate the detection system to a suitable location if there is impedance on the operation, construction related or otherwise.
- (7) The non-intrusive detection system shall be complete, in place, tested, and in full operation during each stage and sub-stage of construction.
- (8) Install pedestrian signal faces on the wood pole or wood post as the plans show. Maintain the height to the bottom of the pedestrian signal face as indicated in SDD Traffic Signal Standard Poly Bracket Mountings (Typical) 13 FT. or 15 FT.
- (9) Install pedestrian push buttons in accordance to standard spec 658.3.5. Mount push buttons so that they are wheelchair accessible from the temporary crossing areas and in accordance to MUTCD Chapter 4.

Append standard spec 661.3.1.1 with the following:

(2) Place the pole in the ground to no less than 1/5 of the pole's length as the plans show. Sawcut existing pavement and concrete curb and gutter as needed to install the wood poles and guy wire anchors. Sawcut existing pavement in accordance to the pertinent provisions in standard spec 690.3, Construction. Remove pavement and concrete curb and gutter as shown on the plans and if needed to install the wood poles and guy wire anchors. Remove only as much pavement as needed to install the wood poles. Remove pavement and curb and gutter in accordance to the pertinent provisions in standard spec 204.3, Construction. Hold any wood poles in place and/or move wood poles during construction due to conflicts with proposed work.

Append standard spec 661.3.1.4 with the following:

- (1) Arrange for every other week inspections with the engineer to check the height of the span wire above the roadways to ensure that the bottom of the traffic signal heads remain within the minimum and maximum heights allowed above the roadway. Make all height adjustments within 1-hour of an inspection indicating that adjustments are required. Notify the engineer in writing upon completion of all necessary adjustments. Maintain a written log to properly document the date of each every other week inspection, the heights above the roadway, the roadway clearance after adjustments have been made and acceptance by the engineer. Provide all documentation related to the every other week span wire height checks as well as all records related to maintenance performed on the temporary traffic signal installations to the engineer.
- (4) Maintain all temporary vehicle detection zones as the plans show or as the engineer directs. The temporary vehicle detection zones shall be set near the vicinity and within the approximate distance from the stop bar as shown on the plans. Check temporary vehicle

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detection zones every other week and at the opening of each stage of temporary traffic signal operation to ensure that they are working and are aimed properly. Periodic adjustment of the detection zones and/or moving of the temporary vehicle detection sensors may be required due to changes in traffic control, staging, or other construction operations.

Ensure that the temporary vehicular detection system stays in clean working order. Periodic cleaning of the equipment may be required due to dirt and dust build-up.

Append standard spec 661.3.2.6 with the following:

(6) Remove the non-intrusive detection system from the temporary traffic signal poles and cabinet.

Append standard spec 661.5 with the following:

- (2) Payment for the Temporary Traffic Signals for Intersections bid item is full compensation for providing, operating, maintaining, and repairing the complete temporary installation; and for removal. Payment also includes the following:
 - 1. Furnishing and installing the replacement equipment.
 - 2. The cost of delivery and pick-up of the cabinet assemblies.
 - 3. Removal of service and site restoration.
 - 4. Traffic signal controller programming and timings (including timing changes).

Payment is full compensation for drilling holes; furnishing and installing all materials, including bricks, and coarse aggregate; for excavation, bedding, and backfilling, including any sand or other required materials; furnishing and placing topsoil, fertilizer, seed, and mulch in disturbed areas; for properly disposing of surplus materials; for making inspections; for checking and/or adjusting the temporary detection zones on an every other week basis; for maintaining and changing the temporary detection zones to match the plans, traffic control, and construction staging; for relocating the temporary detection sensors due to construction activities, if required; for periodically cleaning all temporary vehicle detector equipment; for removing the temporary vehicle detector system; and for cleaning up and properly disposing of waste.

28. Abandoning Pull Boxes, Item SPV.0060.01.

A Description

This special provision describes abandoning pull boxes used by the existing traffic signal equipment as shown on the plans and in accordance to the pertinent requirements of the standard specifications and as hereinafter provided.

B Materials

Furnish concrete material in accordance to standard spec 501.3.1.3. Provide construction materials as necessary to repair and restore adjacent areas to pre-construction conditions.

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C Construction

For pull boxes within the existing roadway:

Remove the existing cover and rim and fill with high-early strength concrete in accordance to standard spec 501.3.1.3. Remove and dispose of any existing wiring (paid as a separate item). Repair any damage to existing pavement to match pre-construction conditions. No additional payment will be made for repair to areas damaged by the contractor's operations.

For pull boxes outside of the existing roadway:

Leave the existing pull box and frame in place and fill with any grade concrete in accordance to standard spec 501.3.1.3. Leave pull box cover in place. Remove and dispose of any existing wiring (paid as a separate item). Repair any damage to curb and gutter, curb ramps, or sidewalk caused by this item of work to match pre-construction conditions. No additional payment will be made for repair to areas damaged by the contractor's operations.

D Measurement

The department will measure Abandoning Pull Boxes as each abandoned pull box 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 Abandoning Pull Boxes Each

Payment is full compensation for properly abandoning each pull box in place; for providing and filling each pull box with concrete; for repairing any damage to curb and gutter, curb ramps, or sidewalk caused by construction; and for site restoration.

29. Fiber Optic Warning Tape, Item SPV.0090.01.

A Description

This special provision describes furnishing and installing fiber optic warning tape above all conduit containing fiber optic cable.

B Materials

Provide underground warning mesh that is constructed of polypropylene and is fluorescent orange in color. Provide 6-inch detectable marking tape that has the words "Buried Fiber Optic Cable" and is orange in color.

C Construction

Lay underground warning mesh above all underground conduits, 12-inches below grade.

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The width of the warning mesh shall be the same as the width of the trench. Lay directly above the underground warning mesh, a 6-inch detectable marking tape that has the words "Buried Fiber Optic Cable" and is orange in color.

D Measurement

The department will measure Fiber Optic Warning Tape in length by the linear foot of tape, measured along the centerline of the conduit, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0090.01Fiber Optic Warning TapeLF

Payment is full compensation for furnishing and installing the marking tape; and for properly disposing of surplus materials.

30. Remove Traffic Signals STH 59 and CTH D, Item SPV.0105.01; STH 59 and Sunset Dr, Item SPV.0105.02; STH 83 and CTH ES, Item SPV.0105.03; STH 100/Brown Deer Rd and STH 181 Ramps, Item SPV.0105.04; STH 100/Ryan Rd and 76th Street, Item SPV.0105.05.

A Description

This special provision describes removing existing traffic signals in accordance to the pertinent provisions of standard spec 204 and as hereinafter provided. Specific removal items are noted in the plans.

B (Vacant)

C Construction

Arrange for the de-energizing of the traffic signals with the local electrical utility after receiving approval from the engineer that the existing traffic signals can be removed.

Notify the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to the removal of the traffic signals. Complete the removal work as soon as possible following shut down of this equipment.

The department assumes that all equipment is in good condition and in working order prior to the contractor's removal operation. Prior to removal, inspect and provide a list of any damaged or non-working traffic signal equipment to the engineer. Any equipment not identified as damaged or not working, prior to removal, will be replaced by the contractor at no cost to the department.

Remove all standards and poles per plan from their concrete footings and disassemble out of traffic. Remove the transformer bases from each pole. Remove the signal heads, mast arms, luminaires, wiring/cabling, and traffic signal mounting devices from each signal

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standard, arm or pole. Ensure that all access hand hole doors and all associated hardware remain intact. Dispose of the underground signal cable, internal wires and street lighting cable off the state right-of-way. Deliver the remaining materials to the West Allis Electrical Service Facility at 935 South 60th Street, West Allis, WI. Contact the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to delivery to make arrangements.

Department forces will remove the signal cabinet from the footing. The signal cabinet and associated signal cabinet equipment will be removed from the site by department forces and will remain the property of the department.

D Measurement

The department will measure Remove Traffic Signals (Location) 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 Traffic Signals STH 59 and CTH D	LS
SPV.0105.02	Remove Traffic Signals STH 59 and Sunset Dr	LS
SPV.0105.03	Remove Traffic Signals STH 83 and CTH ES	LS
SPV.0105.04	Remove Traffic Signals STH 100/Brown Deer Rd and	LS
	STH 181 Ramps	
SPV.0105.05	Remove Traffic Signals STH 100/Ryan Rd and 76 th	LS
	Street	

Payment is full compensation for removing and disassembling traffic signals; for scrapping of some materials; for disposing of scrap material; and for delivering the requested materials to the department.

31. Install State Furnished Traffic Signal Cabinet STH 59 and CTH D, Item SPV.0105.06; STH 59 and Sunset Dr, Item SPV.0105.07; STH 83 and CTH ES, Item SPV.0105.08; STH 100/Brown Deer Rd and STH 181 SB Ramps, Item SPV.0105.09; STH 100/Brown Deer Rd and STH 181 NB Ramps, Item SPV.0105.10; STH 100/Ryan Rd and 76th Street, Item SPV.0105.11.

A Description

This special provision describes the installing of the department furnished traffic signal cabinet for traffic signals.

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B Materials

Use materials furnished by the department including: the traffic signal controller and the traffic signal cabinet. The department will provide notification at the preconstruction meeting of the Traffic Signal Cabinet vendor and provide the vendor's contact information.

Pick up the department furnished materials at the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical Field Unit at (414) 266-1170 and make arrangements for picking up the department furnished materials five (5) working days prior to picking up the materials.

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

Append standard spec 651.3.3 (6) with the following:

Operate the completed traffic signal installation for 30 days consecutively, using the specified signal sequence(s) and all special functions, such as preemption as the plans show or as specified by the engineer.

C Construction

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

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

Coordinate directly with the department's Traffic Signal Cabinet vendor to schedule the cabinet acceptance testing. Notify the department's Electrical Field Unit at (414) 266-1170 and participate in the acceptance testing. The department has the final determination of the cabinet acceptance testing date and time. The acceptance testing procedures will be provided by the department. The department shall not be responsible for project delays and costs due to the delays of delivery by the vendor or by the failure of the Traffic Signal Cabinet to pass acceptance testing.

D Measurement

The department will measure Install State Furnished Traffic Signal Cabinet [Location] as a single lump sum unit of work, in place and accepted.

E Payment

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

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ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.06	Install State Furnished Traffic Signal Cabinet STH 59 and CTH D	LS
SPV.0105.07	Install State Furnished Traffic Signal Cabinet STH 59 and Sunset Dr	LS
SPV.0105.08	Install State Furnished Traffic Signal Cabinet STH 83 and CTH ES	LS
SPV.0105.09	Install State Furnished Traffic Signal Cabinet STH 100/Brown Deer Rd and STH 181 SB Ramps	LS
SPV.0105.10	Install State Furnished Traffic Signal Cabinet STH 100/Brown Deer Rd and STH 181 NB Ramps	LS
SPV.0105.11	Install State Furnished Traffic Signal Cabinet STH 100/Ryan Rd and 76 th Street	LS

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

32. Transporting Signal and Lighting Materials STH 59 and CTH D, Item SPV.0105.12; STH 59 and Sunset Dr, Item SPV.0105.13; STH 83 and CTH ES, Item SPV.0105.14; STH 100/Brown Deer Rd and STH 181 Ramps, Item SPV.0105.15; STH 100/Ryan Rd and 76th Street, Item SPV.0105.16.

A Description

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

B Materials

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

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

C (Vacant)

D Measurement

The department will measure Transporting Signal and Lighting Materials (Location) as a single lump sum unit of work, acceptably completed.

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E Payment

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

Tomo wing ord recini		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.12	Transporting Signal and Lighting Materials STH 59 and CTH D	LS
SPV.0105.13	Transporting Signal and Lighting Materials STH 59 and	LS
	Sunset Dr	
SPV.0105.14	Transporting Signal and Lighting Materials STH 83 and	
	CTH ES	
SPV.0105.15	Transporting Signal and Lighting Materials STH	LS
	100/Brown Deer Rd and STH 181 Ramps	
SPV.0105.16	Transporting Signal and Lighting Materials STH	LS
	100/Ryan Road and 76 th Street	

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

33. Transporting and Installing State Furnished Video Detection System STH 59 and CTH D, Item SPV.0105.17; STH 59 and Sunset Dr, Item SPV.0105.18; STH 83 and CTH ES, Item SPV.0105.19.

A Description

This special provision describes the transporting and installing of department furnished Traffic Signal Video Detection System.

B Materials

Pick up the department furnished Video Detection System for all state maintained traffic signals for the project at the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical field unit at (414 266-1170) to make arrangements for picking up the department furnished materials at least five working days prior to material pick-up.

C Construction

Install the Traffic Signal Power Cable, the camera manufacturer's connector cable whip, pole/arm mounting bracket, extension arm (if required) and camera as shown on the plans (the final determination of location will be made by the department's electrical personnel to ensure best line of sight). The department Electrical Field Unit (EFU) will install State-furnished video detection equipment in the traffic signal control cabinet with assistance from the vendor and contractor.

Install the Traffic Signal Power Cable to run continuously (without splices) from the traffic signal cabinet plus an additional 10 feet to the handhole or base. Leave 10 feet of cable in each pull box. Install the camera manufacturer's connector cable whip from the camera to the handhole or base.

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Mark each end of the lead appropriately to indicate the equipment label (i.e. VID1, VID2, etc.). Splice, solder and shrink wrap the power cable to the camera manufacturer's cable whip. Allow 3 feet of slack on each cable.

Camera programming will be performed by the vendor with assistance from the department and the contractor when operation of the permanent signal begins.

The department will provide notification of the video detection system vendor and provide the vendor's contact information. Coordinate directly with the department's video detection system vendor to arrange for the vendor to program the video detection. Notify the department and vendor at least five working days prior to the date of programming.

D Measurement

The department will measure Transporting and Installing State Furnished Video Detection System (Location) 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.0105.17	Transporting and Installing State Furnished Video	LS
	Detection System STH 59 and CTH D	
SPV.0105.18	Transporting and Installing State Furnished Video	LS
	Detection System STH 59 and Sunset Dr	
SPV.0105.19	Transporting and Installing State Furnished Video	LS
	Detection System STH 83 and CTH ES	

Payment is full compensation for transporting and installing the Video Detection System, Traffic Signal Power Cable, cable whips, mounting hardware, and cameras; arranging for and providing programming by the vendor.

34. Install State Furnished EVP Detector Heads STH 59 and CTH D, Item SPV.0105.20; STH 59 and Sunset Dr, Item SPV.0105.21; STH 83 and CTH ES, Item SPV.0105.22; STH 100/Ryan Rd and 76th Street, Item SPV.0105.23.

A Description

This special provision describes the transporting and installing of department furnished emergency vehicle preemption (EVP) detector heads and EVP detector head mounting brackets.

B Materials

Use materials furnished by the department including: Emergency Vehicle Preemption (EVP) Detector Heads and EVP Detector Head Mounting Brackets.

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

C Construction

Install the EVP detector heads and EVP detector head mounting brackets as shown on the plans. The department will determine the exact location to ensure that the installation does not create a sight obstruction. The department will terminate the EVP cable ends and install the discriminators and card rack in the cabinet.

Notify the department's Electrical shop at (414) 266-1170 upon completion of the installation of the Emergency Vehicle Preemption (EVP) Detector Heads and EVP Detector Head Mounting Brackets.

D Measurement

The department will measure Install State Furnished EVP Detector Heads (Location) as a single lump sum unit of work, acceptably completed.

E Payment

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

Tomo wing ord recin.		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.20	Install State Furnished EVP Detector Heads STH 59 and CTH D	LS
SPV.0105.21	Install State Furnished EVP Detector Heads STH 59 and Sunset Dr	LS
SPV.0105.22	Install State Furnished EVP Detector Heads STH 83 and CTH ES	LS
SPV.0105.23	Install State Furnished EVP Detector Heads STH 100/ Ryan Road and 76 th Street	LS

Payment is full compensation for transporting and installing of department furnished emergency vehicle preemption (EVP) detector heads and EVP detector head mounting brackets.

35. Temporary Infrared EVP System STH 59 and CTH D, Item SPV.0105.24; STH 59 and Sunset Dr, Item SPV.0105.25.

A Description

This special provision describes furnishing, installing, and maintaining temporary EVP systems at the temporary signalized intersection as shown in the plans.

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B Materials

Furnish an emergency vehicle preemption system compatible with the City of Waukesha systems and users. Contact the City of Waukesha (Michael Grulke; (262) 524-3590) for information regarding the equipment needs and operational requirements of the emergency vehicle preemption system.

C Construction

The temporary EVP system, as shown in the temporary traffic signal plans or as directed by the engineer, shall be complete in place, tested, and in full operation during each stage and sub-stage of construction.

Install the temporary vehicle detection system as shown in the plans and according to the manufacturer's recommendations. Determine a suitable location for the temporary EVP detectors for each stage and sub-stage of construction. Detectors may be mounted on the temporary traffic signal span wire or wood poles. Relocate the temporary EVP detectors to a suitable location if construction activities and/or construction staging changes impede the detector operation. Arrange for testing of equipment prior to acceptance of the installation for each construction stage.

All cables associated with the temporary vehicle detection system shall be routed to the cabinet. Each lead shall be appropriately marked as to which EVP channel it is associated.

Periodic adjustment and/or moving of the temporary EVP detectors may be required due to changes in traffic control, staging, or other construction operations.

Ensure that the temporary EVP system stays in clean working order. Periodic cleaning of the equipment may be required due to dirt and dust build-up.

Remove the temporary EVP system upon project completion.

Provide the engineer records of all EVP settings used during construction.

D Measurement

The department will measure Temporary EVP System (Location) as a single complete lump sum unit of work per intersection, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.24	Temporary EVP System STH 59 and CTH D	LS
SPV.0105.25	Temporary EVP System STH 59 and Sunset Dr	LS

Payment is full compensation for furnishing and installing all required equipment, materials, and supplies; for maintaining and changing the EVP detectors to match the plans, traffic control, and construction staging; for relocating the temporary EVP detectors

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due to construction activities, if required; for testing the EVP system for each stage and sub-stage of construction; for periodically cleaning all temporary EVP detectors; for removing the temporary EVP system; and for cleaning up and properly disposing of waste.

36. Remove Loop Detector Wire and Lead-in Cable STH 59 and CTH D, Item SPV.0105.26; STH 59 and Sunset Dr, Item SPV.0105.27; STH 83 and CTH ES, Item SPV.0105.28; STH 100/Brown Deer Rd and STH 181 Ramps, Item SPV.0105.29; STH 100/Ryan Rd and 76th Street, Item SPV.0105.30.

A Description

This special provision describes removing loop detector wire and lead-in cable. Removal shall be in accordance 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 and loop wire for abandoned loops. Detector lead-in cable and loop wire shall become property of the contractor and shall be disposed off of the right-of-way.

D Measurement

The department will measure Remove Loop Detector Wire and Lead-in Cable (Location) 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:

Tonio wing ord recini		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.26	Remove Loop Detector Wire and Lead-in Cable STH 59 and CTH D	LS
SPV.0105.27	Remove Loop Detector Wire and Lead-in Cable STH 59 and Sunset Dr	LS
SPV.0105.28	Remove Loop Detector Wire and Lead-in Cable STH 83 and CTH ES	LS
SPV.0105.29	Remove Loop Detector Wire and Lead-in Cable STH 100/Brown Deer Rd and STH 181 Ramps	LS
SPV.0105.30	Remove Loop Detector Wire and Lead-in Cable STH 100/Rvan Rd and 76 th Street	LS

Payment is full compensation for removing loop detector wire and lead-in cable; for scrapping of some materials; and for disposing of scrap material.

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37. Temporary Vehicle Detection STH 59/l64 and CTH D, Item SPV.0105.31; STH 59 and Sunset Dr, Item SPV.0105.32; STH 100/Brown Deer Rd and STH 181 SB Ramps, Item SPV.0105.33; STH 100/Brown Deer Rd and STH 181 NB Ramps, Item SPV.0105.34.

A Description

This special provision describes furnishing, installing and maintaining vehicle detection systems in conjunction with temporary traffic signals as shown in the plans. The desired vehicle detection zones and their operational parameters are show in the plans.

B Materials

Provide all necessary equipment for the approved method of temporary vehicle detection. Select, with prior approval of the engineer, the vehicle detection technology best suited for the site conditions and the anticipated construction work zones and activities. The engineer reserves the right to request a demonstration of any or all temporary vehicle detection technologies prior to said approval. Vehicle detection technologies considered shall include; but are not limited to: microwave detection, radar detection, or video detection. Detection technology shall provide for true presence detection.

C Construction

Provide immediate response, 24-hour/7-days per week, to maintain any aspect of the temporary vehicle detection that is defective, completing repairs or adjustments the same day as notification.

Adjust, relocate, add, or remove temporary vehicle detection equipment for each traffic control stage or sub stage as shown in the plans, request by the engineer, or as modified by the contractor's operations to maintain the required traffic and complete the proposed work.

D Measurement

The department will measure Temporary Vehicle Detection (Intersection), as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.31	Temporary Vehicle Detection (STH 59/164 and CTH D)	LS
SPV.0105.32	Temporary Vehicle Detection (STH 59 and Sunset Dr)	LS
SPV.0105.33	Temporary Vehicle Detection (STH 100/Brown Deer Rd	LS
SF V.0103.33	and STH 181 SB Ramps)	
SPV.0105.34	Temporary Vehicle Detection (STH 100/Brown Deer Rd	LS
SI V.0103.34	and STH 181 NB Ramps)	

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Payment is full compensation for demonstrating and selecting the vehicle detector technology, furnishing, installing and adjusting or moving the equipment, including all required materials, tools and supplies; and for clean-up and waste disposal.

38. Install Fiber Optic Communications in Cabinet STH 100/Brown Deer Rd and STH 181 Ramps, Item SPV.0105.35.

A Description

This special provision describes the installation of fiber optic communications equipment in the traffic signal cabinet at STH 100/Brown Deer Rd and STH 181 Ramps.

B Materials

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

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

C Construction

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

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

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

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D Measurement

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

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0105.35 Install Fiber Optic Communications in Cabinet STH LS 100/Brown Deer Rd and STH 181 Ramps

Payment is full compensation for installing pre-terminated patch panels, Ethernet switches, and fiber optic cable in conduit; and for furnishing and installing attachment hardware,

fiber jumpers, CAT-5e cable, and locate wire. Removal of the existing equipment from the traffic signal cabinet is paid for as a separate item.

39. Remove, Salvage, and Reinstall InSync Adaptive Traffic Signal Equipment STH 100/Brown Deer Rd and STH 181 Ramps, Item SPV.0105.36.

A Description

This special provision describes removing, salvaging, and reinstalling existing InSync adaptive traffic signal equipment in accordance to the pertinent provisions of standard specs 204, 655, and 658 and as hereinafter provided.

B (Vacant)

C Construction

The department assumes that all equipment is in good condition and in working order prior to the contractor's removal operation. Prior to removal, inspect and provide a list of any damaged or non-working traffic signal heads to the engineer. Replace any equipment not identified as damaged or not working, prior to removal at no cost to the department.

Notify the department at least five working days prior to the removal of the traffic signal equipment. Complete the removal work as soon as possible following de-energizing of the traffic signal.

Remove the adaptive traffic signal equipment, including, but not limited to: video cameras, mounting hardware, cabling, and cabinet equipment per plan. Deliver the materials to the West Allis Electrical Service Facility at 935 South 60th Street, West Allis, WI. Contact the department's Electrical Field Unit at (414) 266-1170 at least five working days prior to delivery to make arrangements. The equipment shall be stored by the department for the duration of the project.

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Upon direction from the engineer, pick up the materials being stored at the West Allis Electrical Service Facility and re-deliver to the site. Reinstall the salvaged equipment on the proposed traffic signal. Perform all work in accordance to standard spec 658. The adaptive system shall be installed in the same manner as the existing traffic signal.

D Measurement

The department will measure Remove, Salvage, and Reinstall InSync Adaptive Traffic Signal Equipment (Location) as a single lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0105.36 Remove, Salvage, and Reinstall InSync Adaptive Traffic LS

Signal Equipment STH 100/Brown Deer Rd and STH

181 Ramps

Payment is full compensation for removing, salvaging, transporting, and reinstalling the adaptive traffic signal equipment.

40. Transporting and Installing State Furnished Radar Detection System STH 59 and CTH D, Item SPV.0105.37; STH 100/Ryan Rd and 76th Street, Item SPV.0105.38.

A Description

This special provision describes the transporting and installing of department furnished Traffic Signal Radar Detection System.

B Materials

Pick up the department furnished Radar Detection System for all department maintained traffic signals for the project at the department's Electrical Shop located at 935 South 60th Street, West Allis. Notify the department's Electrical field unit at (414) 266-1170 to make arrangements for picking up the department furnished materials at least five working days prior to material pick-up.

C Construction

Install the power and connector cabling, pole/arm mounting bracket, extension arm (if required) and detector unit as shown on the plans per the manufacturer's recommendations (the final determination of location will be made by the department's electrical personnel to ensure best line of sight). The department Electrical Field Unit (EFU) shall install State-furnished radar detection equipment in the traffic signal control cabinet with assistance from the vendor and contractor.

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Install the power cable to run continuously (without splices) from the traffic signal cabinet plus an additional 10 feet to the handhole or base. Leave 10 feet of cable in each pull box. Install the radar manufacturer's connector cable from the detector unit to the handhole or base.

Mark each end of the lead appropriately to indicate the equipment label (i.e. RA1, RM1, etc.). Splice, solder and shrink wrap the power cable to the radar manufacturer's cable connection. Allow 3 feet of slack on each cable.

Radar programming will be performed by the vendor with assistance from the department and the contractor when operation of the permanent signal begins.

The department will provide notification of the radar detection system vendor and provide the vendor's contact information. Coordinate directly with the department's radar detection system vendor to arrange for the vendor to program the radar detection. Notify the department and vendor at least five working days prior to the date of programming.

D Measurement

The department will measure Transporting and Installing State Furnished Radar Detection System 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:

C		
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.37	Transporting and Installing State Furnished Radar	LS
	Detection System STH 59 and CTH D	
SPV.0105.38	Transporting and Installing State Furnished Radar	LS
	Detection System STH 100/Ryan Rd and 76 th Street	

Payment is full compensation for transporting and installing the radar detection system, power and signal cabling, mounting hardware, and radar detection units; and for arranging for and providing programming by the vendor.

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ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

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

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

Payment to Lower-Tier Subcontractors

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

Release of Routine Retainage

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

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

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

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

ADDITIONAL SPECIAL PROVISION 6

ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

450.3.2.1 General

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

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

450.5 Payment

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

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

455.3.2.1 General

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

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

460.2.2.3 Aggregate Gradation Master Range

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

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

TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

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

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

460.3.4 Cold Weather Paving

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

460.3.4 Cold Weather Paving

460.3.4.1 Cold Weather Paving Plan

- (1) Submit a written cold weather paving plan to the engineer at the preconstruction meeting. In that plan outline material, operational, and equipment changes for paving when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F. Include the following:
 - Use a department-accepted HMA mix design that incorporates a warm mix additive from the department's approved products list. Do not use a foaming process that introduces water into the mix.
 - Use additional rollers.
- (2) Engineer written acceptance is required for the cold weather paving plan. Engineer acceptance of the plan does not relieve the contractor of responsibility for pavement performance except as specified in 450.5(4).

460.3.4.2 Cold Weather Paving Operations

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

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

460.4 Measurement

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

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

460.5.1 General

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

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

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

460.5.2.2 Disincentive for HMA Pavement Density

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

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

460.5.2.4 Cold Weather Paving

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

460.5.2.4 Cold Weather Paving

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

465.2 Materials

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

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

506.3.2 Shop Drawings

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

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

Bid Items Added

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

ITEM NUMBERDESCRIPTION460.4000HMA Cold Weather Paving

<u>UNIT</u> TON

Errata

Make the following corrections to the standard specifications:

501.3.2.4.4 Water Reducer

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

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

506.5 Payment

Correct errata by changing the reference to 506.3.22.

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

ADDITIONAL SPECIAL PROVISION 7

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

ADDITIONAL SPECIAL PROVISION 9 Electronic Certified Payroll Submittal

- (1) Use the department's Civil Rights Compliance System (CRCS) to submit certified payrolls electronically. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at: http://www.dot.wi.gov/business/civilrights/laborwages/index.htm
- (2) Ensure that all tiers of subcontractors, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.
- (3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Tess Mulrooney at 608-267-4489 to schedule the training.
- (4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.
- (5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator send several sample electronic files to Tess two months before a payroll needs to be submitted. Not every contractor's payroll system is capable of producing export files. For details, see pages 17-22 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at: http://www.dot.wi.gov/business/civilrights/laborwages/docs/crc-payroll-manual.pdf

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DECEMBER 2013

BUY AMERICA PROVISION

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or \$2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this "Buy America" provision.

http://roadwaystandards.dot.wi.gov/standards/cmm/cm-02-28.pdf#cm2-28.5

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

http://roadwaystandards.dot.wi.gov/standards/forms/ws4567.doc

1 of 1

WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

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

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

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

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

Pursuant to Section 103.50 of the Wisconsin Statutes, the prevailing hours of labor have been determined to be up to 10 hours per day and 40 hours per calendar week Monday through Friday. If any laborer, worker, mechanic or truck driver is permitted or required to work more than the prevailing number of hours per day or per calendar week on this contract, they shall be paid for all hours in excess of the prevailing hours at a rate of at least one and one-half (1 1/2) times their hourly rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half: (1) January 1, (2) the last Monday in May, (3) July 4, (4) the first Monday in September, (5) the fourth Thursday in November, (6) December 25, (7) the day before if January 1, July 4 or December 25 falls on a Saturday and (8) the day following if January 1, July 4 or December 25 falls on a Sunday.

All laborers, workers, mechanics and truck drivers shall be paid unconditionally not less often than once a week. Persons who own and operate their own trucks must receive the prevailing truck driver rate for the applicable type of truck (i.e. 2 axle, 3 or more axle, articulated, eculid or dumptor) he or she operates, plus an agreed upon amount for the use of his or her truck. Every owner-operator MUST be paid separately for their driving and for the use of their truck.

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

II. PAYROLL REQUIREMENTS

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

III. POSTINGS AT THE SITE OF THE WORK

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

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

IV. WAGE RATE REDISTRIBUTION

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

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

V. ADDITIONAL CLASSIFICATIONS

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

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

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

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

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

Compiled by the State of Wisconsin - Department of Workforce Development for the Department of Transportation
Pursuant to s. 103.50, Stats.
Issued on May 1, 2015

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

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

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

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

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

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	35.37	17.99	53.36
Carpenter	34.13	20.61	54.74
Future Increase(s): Add \$1.50/hr on 6/1/2015; Add \$1.65/hr on 6/1/20 Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate of Independence Day, Labor Day, Thanksgiving Day & Christmas Day.		ar's Day, Memor	ial Day,
Cement Finisher	32.75	19.21	51.96
Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Department of Transportation or responsible governing agency require artificial illumination with traffic control and the work is completed after Electrician Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate of	ires that work be pe er sunset and befor 33.93	erformed at night re sunrise. 22.77	under 56.70
Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Fence Erector	23.73	19.09	42.82
Ironworker	30.77	23.97	54.74
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate of Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	on Sunday, New Ye	ar's Day, Memor 	ıal Day,
Line Constructor (Electrical)	39.50	21.04	60.54
Painter	29.22	16.69	45.91
Pavement Marking Operator	30.27	18.79	49.06
Piledriver	30.11	26.51	56.62
Future Increase(s): Add \$1.50/hr on 6/1/2015; Add \$1.60/hr on 6/1/20 Premium Pay: Add \$.65/hr for Piledriver Loftsman; Add \$.75/hr for SI two times the hourly basic rate on Sunday, New Year's Day, Memoria Thanksgiving Day & Christmas Day.	heet Piling Loftsma		

WAUKESHA COUNTY Page 2

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Roofer or Waterproofer	29.40	17.05	46.45
Teledata Technician or Installer	24.89	17.15	42.04
Tuckpointer, Caulker or Cleaner	33.76	17.82	51.58
Underwater Diver (Except on Great Lakes)	35.40	15.90	51.30
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONL		15.57	51.12
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	31.60	15.19	46.79
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	27.65	13.44	41.09
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.68	12.83	38.51
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	11.63	33.38
TRUCK DRIVERS			
Single Axle or Two Axle	25.18	18.31	43.49
Future Increase(s): Add \$1.15/hr on 6/1/2015. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate or Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	sunday, New Ye	ar's Day, Memor	ial Day,
Three or More Axle	28.75	13.54	42.29
Articulated, Euclid, Dumptor, Off Road Material Hauler	30.27	21.15	51.42
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate Day, Independence Day, Labor Day, Thanksgiving Day & Christmas D See DOT'S website for details about the applicability of this night work business/ civilrights/ laborwages/ pwc. htm.	ay. 2) Add \$1.50/	hr night work pre	mium.
Pavement Marking Vehicle	23.16	17.13	40.29
Shadow or Pilot Vehicle	24.37	17.77	42.14
Truck Mechanic	28.75	13.54	42.29
LABORERS			
General Laborer	27.06	20.03	47.09
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff	avement), vibratoring torch laborer; and pavement) and perman; Add \$2.01 are 1) Pay two time Day, Thanksgivir setup, for lane are 1) project	or or tamper oper Add \$.35/hr for strike off man; Ad /hr for topman; A s the hourly basi ng Day & Christm nd shoulder closi	ator dd dd c rate as Day. ures,
Asbestos Abatement Worker	00.05	18.41	40.46
Landscaper Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/ Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic raid Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Dinvolving temporary traffic control setup, for lane and shoulder closure conditions is necessary as required by the project provisions (including such time period).	e on Sunday, Nev ay. 2) Add \$1.25/ s, when work und	w Year's Day, Me or for work on pro ler artificial illumi	morial ojects nation

WAUKESHA COUNTY Page 3

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS \$	TOTAL
Flagperson or Traffic Control Person Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2015; Add \$1.00	23.55 6/01/2016; Add \$1. ate on Sunday, Ner Day. 2) Add \$1.25/ res that work be po	20.03 00/hr eff. 06/01/2 w Year's Day, Me hr when the Wise erformed at night	emorial consin
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.71	16.01	33.72
Railroad Track Laborer	14.50	4.07	18.57
HEAVY EQUIPMENT OPERATORS			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower Derrick, With or Without Attachments, With a Lifting Capacity of Over 10 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 L Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/20 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic raday, Independence Day, Labor Day, Thanksgiving Day & Christmas I See DOT'S website for details about the applicability of this night wor business/ civilrights/ laborwages/ pwc. htm.	r or 0 .bs., 016; Add \$1.25/hr o ate on Sunday, Ne Day. 2) Add \$1.50/	w Year's Day, Me hr night work pre	mium.
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower 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 Pilor (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2015; Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rance Day, Independence Day, Labor Day, Thanksgiving Day & Christmas I See DOT'S website for details about the applicability of this night wor business/ civilrights/ laborwages/ pwc. htm.	r or er; t 016; Add \$1.25/hr o ate on Sunday, Ne Day. 2) Add \$1.50/	w Year's Day, Me hr night work pre	mium.
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screat Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vlbratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gut Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane Wlth a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Gr Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor	eed; s ter J Tub out	21.15	57.87

WAUKESHA COUNTY Page 4

TRADE OR OCCUPATION

HOURLY BASIC RATE OF PAY

36.46

36.17

HOURLY FRINGE BENEFITS

21.15

TOTAL

57.61

Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over): Straddle Carrier or Travel Lift: Tractor (Scraper, Dozer, Pusher, Loader): Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A- Frames.

Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.

Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader: Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or WIthout Attachments); Telehandler; Tining or Curing Machine.

Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day, 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.

Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.

Future Increase(s): Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.

Fiber Optic Cable Equipment. 28.89 17.95 46.84

21.15

57.32

Wisconsin Department of Transportation PAGE: 1 DATE: 03/17/15

REVISED:

SCHEDULE OF ITEMS

LINE		APPROX.	UNIT PRICE	BID AMOUNT	
NO	DESCRIPTION	QUANTITY AND UNITS	 DOLLARS CTS	 DOLLARS CTS	
SECTI	ON 0001 Roadway Items				
0010	204.0110 Removing Asphaltic Surface 	 611.000 SY		 	
	204.0150 Removing Curb & Gutter	 199.000 LF		 	
	204.0155 Removing Concrete Sidewalk	 223.000 SY		 	
	204.0195 Removing Concrete Bases	 62.000 EACH			
0050	204.0220 Removing Inlets 	 1.000 EACH			
	205.0100 Excavation Common 	 16.000 CY			
	205.0501.S Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	100.000 TON			
0080	208.0100 Borrow 	 72.000 CY		 	
0090	305.0120 Base Aggregate Dense 1 1/4-Inch	300.000 TON		 	
0100	390.0403 Base Patching Concrete Shes	362.000	 		

Wisconsin Department of Transportation PAGE: 2 DATE: 03/17/15

SCHEDULE OF ITEMS

REVISED:

LINE	!	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION 	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS
	416.0610 Drilled Tie Bars 	 80.000 EACH		·
	416.0620 Drilled Dowel Bars 	 432.000 EACH		
0130	455.0605 Tack Coat 	 18.000 GAL		
	465.0105 Asphaltic Surface 	 211.000 TON		
	502.5010 Masonry Anchors Type L No. 6 Bars 	 14.000 EACH		
0160	520.8000 Concrete Collars for Pipe 	 1.000 EACH		
0170	521.0130 Culvert Pipe Corrugated Steel 30-Inch 	 24.000 LF		
	521.0749 Pipe Arch Corrugated Steel 49x33-Inch	 6.000 LF		
0190	521.1530 Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 30-Inch 6 to 1	 1.000 EACH		
0200	521.1630 Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 30-Inch 10 to 1	 1.000 EACH		

Wisconsin Department of Transportation PAGE: 3 DATE: 03/17/15

SCHEDULE OF ITEMS

REVISED:

LINE	TTEM DESCRIPTION	!	PROX.	UNIT PR		BID AM	
NO	DESCRIPTION	. ~ .		DOLLARS			CTS
	601.0105 Concrete Curb Type A 	 LF	100.000		•	 	
0220	601.0553 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	 LF	240.000 			 	
	602.0405 Concrete Sidewalk 4-Inch	 2 SF	 2,050.000 				·
0240	602.0505 Curb Ramp Detectable Warning Field Yellow	 SF	14.000				
0250	606.0100 Riprap Light 	 CY	5.000 				
	611.0545 Manhole Covers Type L 	 EACH	1.000			 	
	611.0642 Inlet Covers Type MS 	 EACH	2.000 			 	
	611.2006 Manholes 6-FT Diameter 	 EACH	1.000			 	
	611.3902	 EACH	1.000			 	
0300	619.1000 Mobilization 	 EACH	1.000			 	
	625.0500 Salvaged Topsoil 	 SY	 550.000 			 	

Wisconsin Department of Transportation PAGE: 4 DATE: 03/17/15

SCHEDULE OF ITEMS

REVISED:

LINE		APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS		DOLLARS CT
0320	628.1504 Silt Fence 	 200.000 LF	-	
	628.1520 Silt Fence Maintenance 	 200.000 LF		
	628.1905 Mobilizations Erosion Control	 5.000 EACH		
0350	628.1910 Mobilizations Emergency Erosion Control	 5.000 EACH	- -	·
	628.2008 Erosion Mat Urban Class I Type B 	400.000		
	628.7005 Inlet Protection Type A	3.000 EACH		
	628.7015 Inlet Protection Type C	 25.000 EACH		
	628.7504 Temporary Ditch Checks	 50.000 LF		
	628.7555 Culvert Pipe Checks	 5.000 EACH		
0410	629.0210 Fertilizer Type B 	 0.400 CWT		
	630.0130 Seeding Mixture No. 30	 10.000 LB		

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SCHEDULE OF ITEMS

REVISED:

LINE	!	!	APPROX.	UNIT PF	RICE	BID AM	OUNT
NO	DESCRIPTION 	QUANTITY		DOLLARS	CTS	DOLLARS	CT
0430	631.1000 Sod Lawn 	 SY	180.000			 	
	634.0616 Posts Wood 4x6-Inch X 16-FT	 EACH	49.000 49.000			 	
	634.0618 Posts Wood 4x6-Inch X 18-FT	 EACH	 80.000			 	
	637.2210 Signs Type II Reflective H 	 SF	1,647.210 			 	
	637.2215 Signs Type II Reflective H Folding 	 SF	246.180 246.180			 	
	637.2230 Signs Type II Reflective F 	 SF	228.670 228.670			 	
	638.2102 Moving Signs Type II 	 EACH	5.000 5.000			 	
	638.2602 Removing Signs Type II 	 EACH	123.000			 	
	638.3000 Removing Small Sign Supports	 EACH	58.000 58.000			 	
	643.0200 Traffic Control Surveillance and Maintenance (project) 01. 3700-20-74	 DAY 	230.000			 	
0530	643.0300 Traffic Control Drums	 DAY	25,250.000			 	

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SCHEDULE OF ITEMS

REVISED:

LINE	I	APPROX.		UNIT PR	RICE	BID AM	OUNT
NO	DESCRIPTION	QUANTITY AND UNITS		DOLLARS	CTS	DOLLARS	CTS
	643.0420 Traffic Control Barricades Type III 	 920. DAY	 000 				
	643.0705 Traffic Control Warning Lights Type A 	 1,840. DAY	 000 	 	•	 	
	643.0715 Traffic Control Warning Lights Type C 	 5,500. DAY	 000 	 	•	 	
	643.0900 Traffic Control Signs 	 5,680. DAY	 000 	 	•	 	
	643.1050 Traffic Control Signs PCMS 	!	 000	 	•	 	
	650.4000 Construction Staking Storm Sewer	 4. EACH	 000	 	•	 	
	650.4500 Construction Staking Subgrade 	 470.	 000 	 	•	 	
	650.5000 Construction Staking Base 	 470.	 000 	 		 	
0620	650.5500 Construction Staking Curb Gutter and Curb & Gutter	 232. LF	 000	 	•	 	
	650.8500 Construction Staking Electrical Installations (project) 01. 3700-20-74	 LUMP 	 	 LUMP 			

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SCHEDULE OF ITEMS

REVISED:

LINE	ITEM	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION 	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS
	650.9910 Construction Staking Supplemental Control (project) 01. 3700-20-74	 LUMP 	LUMP	
	652.0215 Conduit Rigid Nonmetallic Schedule 40 1 1/4-Inch	 10.00)) 	
0660	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	 1,158.00 LF)) 	
	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	 1,875.00)) .	
	652.0605 Conduit Special 2-Inch 	 150.00) 	
	652.0615 Conduit Special 3-Inch 	7,659.00) .	
	652.0700.S Install Conduit into Existing Item	 7.00) 	 .
	652.0800 Conduit Loop Detector 	740.00)) 	 .
	653.0135 Pull Boxes Steel 24x36-Inch	 11.00) .	
0730	653.0140 Pull Boxes Steel 24x42-Inch	 62.00 EACH	o	
	653.0905 Removing Pull Boxes	71.00	 0 .	

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SCHEDULE OF ITEMS

REVISED:

LINE	ı	APPROX.		UNIT PR	BID AM	
NO	DESCRIPTION 	QUANTITY AND UNITS		DOLLARS	 DOLLARS	CTS
0750	654.0101 Concrete Bases Type 1 	 24.0 EACH	 00		 	
0760	654.0102 Concrete Bases Type 2 	 2.0 EACH	 00		 	
	654.0105 Concrete Bases Type 5 	 1.0 EACH	 00 		 	
0780	654.0110 Concrete Bases Type 10 	 10.0 EACH	00		 	
	654.0113 Concrete Bases Type 13 	 13.0 EACH	 00 		 	•
0800	654.0217 Concrete Control Cabinet Bases Type 9 Special	 6.0 EACH	 00		 	
0810	655.0230 Cable Traffic Signal 5-14 AWG 	 3,869.0 LF	 00		 	
0820	655.0240 Cable Traffic Signal 7-14 AWG 	 4,333.0 LF	 00		 	
0830	655.0260 Cable Traffic Signal 12-14 AWG 	 6,831.0 LF	 00		 	
0840	655.0270 Cable Traffic Signal 15-14 AWG 	 2,079.0 LF	 00 		 	
	655.0320 Cable Type UF 2-10 AWG Grounded 	3,049.0	 00 		 	

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SCHEDULE OF ITEMS

REVISED:

LINE	ITEM	APPROX.	UNIT PR	ICE	BID AM	OUNT
NO	DESCRIPTION	QUANTITY AND UNITS	 DOLLARS	CTS	DOLLARS	CTS
	655.0515 Electrical Wire Traffic Signals 10 AWG	 11,104.000 LF	 			
	655.0520 Electrical Wire Traffic Signals 8 AWG	 555.000 LF				
	655.0610 Electrical Wire Lighting 12 AWG	2,962.000	 			
	655.0700 Loop Detector Lead In Cable	 11,494.000 LF	 			
	655.0800 Loop Detector Wire	 2,458.000 LF	 			
	655.0900 Traffic Signal EVP Detector Cable	 4,935.000 LF	 			
	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. STH 59 & CTH D	LUMP	 LUMP 			
	656.0200 Electrical Service Meter Breaker Pedestal (location) 02. STH 59 & Sunset Dr.	LUMP	 LUMP 			
	656.0200 Electrical Service Meter Breaker Pedestal (location) 03. STH 83 & CTH ES	 LUMP 	 LUMP 			

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REVISED:

SCHEDULE OF ITEMS

LINE	I .	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	DOLLARS CTS
0950	656.0200 Electrical Service Meter Breaker Pedestal (location) 04. STH 100/Brown Deer Rd & STH 181 Ramps	 LUMP 	 LUMP 	
0960	656.0200 Electrical Service Meter Breaker Pedestal (location) 05. STH 100/Ryan Rd & 76th St	 LUMP 	 LUMP 	
0970	657.0100 Pedestal Bases 	23.000 EACH		
0980	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	 4.000 EACH	 	
0990	657.0310 Poles Type 3 	 1.000 EACH	 	
1000	657.0315 Poles Type 4 	 2.000 EACH	 	
	657.0322 Poles Type 5-Aluminum	 1.000 EACH	 	
1020	657.0405 Traffic Signal Standards Aluminum 3. 5-FT	 1.000 EACH	 	
	657.0420 Traffic Signal Standards Aluminum 13-FT	 12.000 EACH	 	
	657.0425 Traffic Signal Standards Aluminum 15-FT	 7.000 EACH	 	

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SCHEDULE OF ITEMS

REVISED:

LINE	TITEM DESCRIPTION	APPROX.	UNIT PR		BID AM	
NO	DESCRIPTION	QUANTITY AND UNITS	1		DOLLARS	CTS
1050	657.0430 Traffic Signal Standards Aluminum 10-FT 	3.000 EACH	 	•	 	
1060	657.0595 Trombone Arms 25-FT 	 1.000 EACH	 	•	 	
1070	657.0610 Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	 4.000 EACH	 		 	
1080	657.1345 Install Poles Type 9 	 2.000 EACH	 		 	
	657.1350 Install Poles Type 10 	 8.000 EACH			 	
	657.1355 Install Poles Type 12 	 4.000 EACH			 	
	657.1360 Install Poles Type 13 	 9.000 EACH	 		 	
1120	657.1515 Install Monotube Arms 15-FT 	 3.000 EACH	 	•	 	
1130	657.1525 Install Monotube Arms 25-FT 	 4.000 EACH			 	
1140	657.1530 Install Monotube Arms 30-FT 	3.000 EACH	 		 	
1150	657.1535 Install Monotube Arms 35-FT 	 1.000 EACH	 		 	

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SCHEDULE OF ITEMS

REVISED:

LINE NO	TTEM DESCRIPTION	APPROX.	ļ	UNIT PR		BID AM	
NO	DESCRIPTION	QUANTITY AND UNITS		DOLLARS	CTS	!	CTS
	657.1545 Install Monotube Arms 45-FT 	 4.0 EACH	 00 			 	
1170	657.1550 Install Monotube Arms 50-FT	 1.0 EACH	 00 			 	
	657.1555 Install Monotube Arms 55-FT 	 7.0 EACH	 00 			 	
1190	657.1815 Install Luminaire Arms Steel 15-FT	 18.0 EACH	00			 	•
	658.0110 Traffic Signal Face 3-12 Inch Vertical 	 70.0 EACH	 00 			 	
	658.0115 Traffic Signal Face 4-12 Inch Vertical 	 25.0 EACH	 00 				
	658.0120 Traffic Signal Face 5-12 Inch Vertical 	 4.0 EACH	 00 			 	
1230	658.0215 Backplates Signal Face 3 Section 12-Inch	 70.0 EACH	 00 			 	
1240	658.0220 Backplates Signal Face 4 Section 12-Inch	 25.0 EACH	 00 				
1250	658.0225 Backplates Signal Face 5 Section 12-Inch	 4.0 EACH	00			 	
	658.0412 Pedestrian Signal Face 12-Inch 	 12.0 EACH	 00			 	

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SCHEDULE OF ITEMS

REVISED:

LINE	!	APPR		UNIT PR 		BID AM	
NO	DESCRIPTION 	QUANTITY -		DOLLARS		DOLLARS	CTS
1270	658.0416 Pedestrian Signal Face 16-Inch 	 EACH	2.000	 		 	
1280	658.0500 Pedestrian Push Buttons 	 EACH	14.000			 	
	658.0600 Led Modules 12-Inch Red Ball 	 EACH	76.000			 	
1300	658.0605 Led Modules 12-Inch Yellow Ball 	 EACH	76.000			 	·
	658.0610 Led Modules 12-Inch Green Ball 	 EACH	76.000			 	
1320	658.0615 Led Modules 12-Inch Red Arrow 	 EACH	23.000			 	
	658.0620 Led Modules 12-Inch Yellow Arrow	 EACH	45.000	 		 	
1340	658.0625 Led Modules 12-Inch Green Arrow 	 EACH	34.000	 		 	
1350	658.0635 Led Modules Pedestrian Countdown Timer 16-Inch	 EACH	2.000			 	
1360	658.0660 Led Modules Countdwn Timer 12-Inch 	 EACH	12.000		•	 	
1370	658.5069 Signal Mounting Hardware (location) 01. STH 59 & CTH D	 LUMP 	 	 LUMP 		 	

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SCHEDULE OF ITEMS

REVISED:

LINE NO	TTEM DESCRIPTION	APPROX. OUANTITY	UNIT PRICE	BID AMOUNT
		AND UNITS	DOLLARS CTS	DOLLARS CT
1380	658.5069 Signal Mounting Hardware (location) 02. STH 59 & Sunset Dr.	 LUMP 	 LUMP	
	658.5069 Signal Mounting Hardware (location) 03. STH 83 & CTH ES	 LUMP 	 LUMP 	
	658.5069 Signal Mounting Hardware (location) 04. STH 100/Brown Deer Rd & STH 181 Ramps	 LUMP 	LUMP	
1410	658.5069 Signal Mounting Hardware (location) 05. STH 100/Ryan Rd & 76th St	 LUMP 	LUMP	
	659.1125 Luminaires Utility LED C 	 22.000 EACH		
	661.0200 Temporary Traffic Signals for Intersections (location) 01. STH 59 & CTH D	 LUMP 	 LUMP 	
	661.0200 Temporary Traffic Signals for Intersections (location) 02. STH 59 & Sunset Dr.	 LUMP 	 LUMP 	
	661.0200 Temporary Traffic Signals for Intersections (location) 03. STH 83 & CTH ES	 LUMP 	LUMP	
	661.0200 Temporary Traffic Signals for Intersections (location) 04. STH 100/Brown Deer Rd & STH 181 SB Ramps	 LUMP 	LUMP	

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SCHEDULE OF ITEMS

REVISED:

LINE	!	APPROX.		UNIT PR	BID AM	
NO	DESCRIPTION 	QUANTITY AND UNITS		DOLLARS	 DOLLARS	CTS
1470	661.0200 Temporary Traffic Signals for Intersections (location) 05. STH 100/Brown Deer Rd & STH 181 NB Ramps	LUMP	 Lt	ЈМР	 	
1480	661.0200 Temporary Traffic Signals for Intersections (location) 06. STH 100/Ryan Rd & 76th St	LUMP	 Lt 	ЈМР	 	
1490	674.0300 Remove Cable 	 150	000		 	
1500	674.0400 Reinstall Cable 	 150. LF	000		 	
1510	690.0150 Sawing Asphalt 	 675. LF	000		 	
1520	690.0250 Sawing Concrete 	 940. LF	000		 	
	SPV.0060 Special 01. Abandon Pull Boxes 	 47. EACH	000		 	
1540	SPV.0090 Special 01. Fiber Optic Warning Tape	 156	000		 	
	SPV.0105 Special 01. Remove Traffic Signals STH 59 & CTH D	 LUMP	 Lt	UMP	 	
	SPV.0105 Special 02. Remove Traffic Signals STH 59 & Sunset Dr	 LUMP 	 Lt	JMP	 	

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SCHEDULE OF ITEMS

REVISED:

LINE	!	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION	QUANTITY AND UNITS	DOLLARS CTS	
	SPV.0105 Special 03. Remove Traffic Signals STH 83 & CTH ES	 LUMP 	 LUMP	
1580	SPV.0105 Special 04. Remove Traffic Signals STH 100/Brown Deer Rd & STH 181	 LUMP 	 LUMP 	
1590	SPV.0105 Special 05. Remove Traffic Signals STH 100/Ryan Rd & 76th St	 LUMP 	 LUMP 	
1600	SPV.0105 Special 06. Install State Furnished Traffic Sgnl Cabinet STH 59 & CTH D	 LUMP 	 LUMP 	
1610	SPV.0105 Special 07. Install State Furnished Traffic Sgnl Cabinet STH 59 & Sunset Dr.	 LUMP 	 LUMP	
1620	SPV.0105 Special 08. Install State Furnished Traffic Sgnl Cabinet STH 83 & CTH ES	 LUMP 	 LUMP	
1630	SPV.0105 Special 09. Inst State Furn Traffic Sgnl Cabinet STH 100/Brwn Deer Rd & SB STH 181	 LUMP 	 LUMP	
1640	SPV.0105 Special 10. Inst State Furn Traffic Sgnl Cabinet STH 100/Brwn Deer Rd & NB STH 181	 LUMP 	 LUMP 	

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SCHEDULE OF ITEMS

LINE	!	APPROX.	UNIT PRICE	BID AM 	
NO	DESCRIPTION	QUANTITY AND UNITS	1	 DOLLARS	CT
1650	SPV.0105 Special 11. Install State Furnished Traffic Sgnl Cabinet STH 100 / Ryan Rd & 76th St	 LUMP 	LUMP	 	
1660	SPV.0105 Special 12. Transporting Signal and Lighting Materials STH 59 & CTH D	 LUMP 	LUMP	 	
1670	SPV.0105 Special 13. Transporting Signal and Lighting Materials STH 59 & Sunset Dr.	 LUMP 	 LUMP 	 	
1680	SPV.0105 Special 14. Transporting Signal and Lighting Materials STH 83 & CTH ES	 LUMP 	LUMP	 	
1690	SPV.0105 Special 15. Transporting Signal and Lighting Materials STH 100/Brown Deer & STH 181	 LUMP 	LUMP	 	
1700	SPV.0105 Special 16. Transporting Signal and Lighting Materials STH 100/Ryan Rd & 76th St	 LUMP 	LUMP	 	
1710	SPV.0105 Special 17. Transport and Install State Furnshed Video Detection System STH 59 & CTH D	 LUMP 	 LUMP 	 	
1720	SPV.0105 Special 18. Transport and Install State Furnshed Video Detection Sys STH 59 & Sunset Dr	 LUMP 	LUMP	 	

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SCHEDULE OF ITEMS

REVISED:

LINE	!	APPROX.	UNIT PRICE	BID AMOUNT
NO	DESCRIPTION 	QUANTITY AND UNITS	DOLLARS CTS	 DOLLARS CT
1730	SPV.0105 Special 19. Transport and Install State Furnshed Video Detection System STH 83 & CTH ES	 LUMP 	LUMP	
1740	SPV.0105 Special 20. Install State Furnished EVP Detector Heads STH 59 & CTH D	 LUMP 	LUMP	
1750	SPV.0105 Special 21. Install State Furnished EVP Detector Heads STH 59 & Sunset Dr	 LUMP 	 LUMP 	
1760	SPV.0105 Special 22. Install State Furnished EVP Detector Heads STH 83 & STH ES	 LUMP 	LUMP	
1770	SPV.0105 Special 23. Install State Furnished EVP Detector Heads STH 100 & S. 76th St	 LUMP 	LUMP	
	SPV.0105 Special 24. Temporary Infrared EVP System STH 59 & CTH D	 LUMP 	 LUMP 	
1790	SPV.0105 Special 25. Temporary Infrared EVP System STH 59 & Sunset Dr	 LUMP 	LUMP	
	SPV.0105 Special 26. Remove Loop Detector Wire & Lead-in Cable STH 59 & CTH D	 LUMP 	LUMP	 .

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REVISED: SCHEDULE OF ITEMS

LINE	TITEM DESCRIPTION	APPROX.	UNIT PF		BID AM	
NO	DESCRIPTION	QUANTITY AND UNITS	1		DOLLARS	CTS
1810	SPV.0105 Special 27. Remove Loop Detector Wire & Lead-in Cable STH 59 & Sunset Dr.	 LUMP 	 LUMP 		 	
1820	SPV.0105 Special 28. Remove Loop Detector Wire & Lead-in Cable STH 83 & CTH ES	 LUMP 	LUMP		 	
1830	SPV.0105 Special 29. Remove Loop Detector Wire & Lead-in Cable STH 100/Brown Deer Rd & STH 181	 LUMP 	 LUMP 		 	
1840	SPV.0105 Special 30. Remove Loop Detector Wire & Lead-in Cable STH 100/Ryan Rd & 76th Street	 LUMP 	 LUMP 		 	
1850	SPV.0105 Special 31. Temporary Vehicle Detection STH 59/ 164 & CTH D	 LUMP 	 LUMP 		 	
1860	SPV.0105 Special 32. Temporary Vehicle Detection STH 59 & Sunset Dr.	 LUMP 	 LUMP 		 	
1870	SPV.0105 Special 33. Temporary Vehicle Detection STH 100/Brown Deer Rd & STH 181 SB Ramps	 LUMP 	 LUMP 		 	
1880	SPV.0105 Special 34. Temporary Vehicle Detection STH 100/Brown Deer Rd & STH 181 NB Ramps	 LUMP 	 LUMP 		 	

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SCHEDULE OF ITEMS

REVISED:

LINE	ITEM DESCRIPTION	APPROX.	UNIT PRICE	BID AMOUNT
NO		QUANTITY AND UNITS	DOLLARS CTS	 DOLLARS CTS
1890	SPV.0105 Special 35. Install Fiber Optic Comm in Cabinet STH 100/Brown Deer Rd & STH 181	 LUMP 	 LUMP 	
1900	SPV.0105 Special 36. Rmv Slvg & Reinstall InSync Adptv Trffc Sgnl Equip STH 100 & STH 181	 LUMP 	 LUMP 	
1910	SPV.0105 Special 37. Transport and Install State Furnshed Radar Detect System STH 59 & CTH D	 LUMP 	 LUMP 	
1920	SPV.0105 Special 38. Transport and Install State Furnshed Radar Detect Syst STH100/Ryan Rd&76thSt	 LUMP 	 LUMP 	
	 SECTION 0001 TOTAL			·
	 TOTAL BID			

PLEASE ATTACH SCHEDULE OF ITEMS HERE