HIGHWAY WORK PROPOSAL

Wisconsin Department of Transportation
06/2017 s.66.0901(7) Wis. Stats

Proposal Number: 021

COUNTY	STATE PROJECT	FEDERAL	PROJECT DESCRIPTION	HIGHWAY
Racine	2704-00-76	N/A	Wisconn Valley Way, V Mt Pleasant; Cth KR To STH 11	LOC STR

ADDENDUM REQUIRED

ATTACHED AT BACK

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

Proposal Guaranty Required: $450,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: March 12, 2019 Time (Local Time): 9:00 am	Firm Name, Address, City, State, Zip Code SAMPLE NOT FOR BIDDING PURPOSES
Contract Completion Time May 30, 2020	
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)	(Bidder Title)

Notary Seal

Type of Work: For Department Use Only

Removals, grading, base aggregate, concrete pavement, storm sewer, erosion control, permanent signing, traffic signals, traffic control, pavement markings, and landscaping

Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH
PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2015 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

(1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:

1. Electronic bid on the internet.
2. Electronic bid on a printout with accompanying diskette or CD ROM.
3. Paper bid under a waiver of the electronic submittal requirements.

(2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.

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

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 PM local time on the Thursday before the letting. Check the department's web site after 5:00 PM 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 PM 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:
https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, 4th floor, 4822 Madison Yards Way, Madison, WI, during regular business hours.

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

B Submitting Electronic Bids

B.1 On the Internet

(1) Do the following before submitting the bid:

1. Have a properly executed annual bid bond on file with the department.

2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.

(2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:

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

(3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

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

(1) Download the latest schedule of items from the Wisconsin pages of the Bid Express™ web site reflecting the latest addenda posted on the department's web site at:
https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

Use Expedite ™ software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express™ web site to assure that the schedule of items is prepared properly.

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

Bidder Name

BN00

Proposals: 1, 12, 14, & 22

(3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.

(4) The bidder-submitted printout of the Expedite™ generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.

(5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:

1. The check code printed on the bottom of the printout of the Expedite™ generated schedule of items is not the same on each page.
2. The check code printed on the printout of the Expedite™ generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.

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

C Waiver of Electronic Submittal

(1) The bidder may request a waiver of the electronic submittal requirements. Submit a written request for a waiver in lieu of bids submitted on the internet or on a printout with accompanying diskette or CD ROM. Use the waiver that was included with the paper bid document sent to the bidder or type up a waiver on the bidder's letterhead. The department will waive the electronic submittal requirements for a bidding entity (individual, partnership, joint venture, corporation, or limited liability company) for up to 4 individual proposals in a calendar year. The department may allow additional waivers for equipment malfunctions.

(2) Submit a schedule of items on paper conforming to section 102 of the standard specifications. The department charges the bidder a $75 administrative fee per proposal, payable at the time and place the department designates for receiving bids, to cover the costs of data entry. The department will accept a check or money order payable to: "Wisconsin, Dept. of Transportation."

(3) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:

1. The bidder fails to provide the written request for waiver of the electronic submittal requirements.
2. The bidder fails to pay the $75 administrative fee before the time the department designates for the opening of bids unless the bidder requests on the waiver that they be billed for the $75.
3. The bidder exceeds 4 waivers of electronic submittal requirements within a calendar year.

(4) In addition to the reasons specified in section 102 of the standard specifications, the department may refuse to issue bidding proposals for future contracts to a bidding entity that owes the department administrative fees for a waiver of electronic submittal requirements.

PROPOSAL BID BOND

Wisconsin Department of Transportation

DT1303 1/2006

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

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

(Signature of Attorney-in-Fact)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

Wisconsin Department of Transportation

DT1305 8/2003

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

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

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

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

(Signature of Authorized Contractor Representative) (Date)

March 2010

LIST OF SUBCONTRACTORS

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

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

Name of Subcontractor	Class of Work	Estimated Value

DECEMBER 2000

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

Instructions for Certification

1. By signing and submitting this proposal, the prospective contractor is providing the certification set out below.

2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contractor shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective contractor to furnish a certification or an explanation shall disqualify such person from participation in this transaction.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the department determined to enter into this transaction. If it is later determined that the contractor knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government the department may terminate this transaction for cause or default.

4. The prospective contractor shall provide immediate written notice to the department to whom this proposal is submitted if at any time the prospective contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department to which this proposal is being submitted for assistance in obtaining a copy of those regulations.

6. The prospective contractor agrees by submitting this proposal that, should this contract be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department entering into this transaction.

7. The prospective contractor further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," which is included as an addendum to PR-1273 - "Required Contract Provisions Federal Aid Construction Contracts," without

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

8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department may terminate this transaction for cause or default.

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

(1) The prospective contractor certifies to the best of its knowledge and belief, that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offense enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(2) Where the prospective contractor is unable to certify to any of the statements in this certification, such prospective contractor shall attach an explanation to this proposal.

Special Provisions

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 2704-00-76, Wisconn Valley Way, V MT Pleasant, CTH KR to STH 11, LOC STR, located in Racine County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2019 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 (20180628)

2. Scope of Work.

The work under this contract shall consist of removals, grading, base aggregate, concrete pavement, storm sewer, erosion control, permanent signing, traffic signals, traffic control, pavement markings, restoration and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

3. Non-mandatory Pre-Bid Meeting

Prospective bidders are invited to attend a non-mandatory pre-bid meeting on Thursday, February 21, 2019 at 9:00 AM at the Mt Pleasant Village Hall, 8811 Campus Drive, Mount Pleasant, WI 53406.

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

4. Wisconsin Inclusion Plan.

Utilization Plan and Other Inclusion Efforts

WisDOT recognizes the intentions of the Local Development Agreement to encourage inclusion for targeted businesses and workforce participants. Bidders are encouraged to make good-faith efforts to achieve these intentions within these contract provisions.

Requirement at the Time of Bid

All Bidders should submit a Wisconsin Utilization Plan at the time of bid demonstrating how s/he will achieve the inclusion objectives for targeted businesses and workforce participants. The submission should comply with the Wisconsin Utilization Plan.

The Wisconsin Utilization Plan should be submitted to the Wisconsin Department of Transportation: Attn: Beth Cannestra at dotdtsdbpd@dot.wi.gov. For questions regarding this provision please contact Michele Carter at Michele.Carter@dot.wi.gov.

A Public Infrastructure Construction Workforce Engagement Advisory Committee has been created to review trends in all bidders' Wisconsin Inclusion Plan submittals for communication and engagement purposes in the local community.

Business Inclusion Goals, Registration and Certification Requirements

WisDOT recognizes that the Local Development Agreement includes language to encourage local and disadvantaged business inclusion. As a result, the following workforce goals and resources have been established that are consistent with Foxconn's inclusion goals for their project:

Wisconsin based Business	60%
Racine County based Businesses	10%
Minority-Owned (MBE) Business Enterprises	10% Combined
Women-Owned (WBE) Enterprises	
Veteran-Owned Business Enterprises	
Directory of Wisconsin based Businesses Directory of Racine County based Businesses	Wisconsin Department of Revenue

The Wisconsin Utilization Plan is to demonstrate the Bidder's efforts to maximize inclusion of targeted businesses and/or intermediaries which are certified and recognized, to include:

Business Category/Certification	Registration Certification Type
Minority Business Enterprise (MBE)	MBE
North Central Minority Supplier Development Council	MSDC
Women-owned Business Enterprise (WBE)	WBENC
Women's Business Enterprise National Council	
Wisconsin Unified Certification DBE Program	City of Madison DOT, Dane County, Milwaukee County Links
Emerging Business Enterprise (EBE)	EBE
Small Business Enterprise (SBE)	SBE
Service Disabled Veteran and or Veteran-owned business (SDV/SVB)	SDV/SVB
Wisconsin Economic Development Corporation	WEDC

Approved List of Targeted Businesses Intermediaries	
African American Chamber of Commerce of Wisconsin	Pan-African Community Association
American Indian Chamber of Commerce of Wisconsin	The Business Council, Inc.
Greater Milwaukee Chamber of Commerce	Wisconsin Black Chamber of Commerce, Inc.
Hmong Wisconsin Chamber of Commerce	Wisconsin Chinese Chamber of Commerce
Latino Entrepreneurial Network	Wisconsin LGBT Chamber of Commerce
Milwaukee Inner-City Congregations Allied for Home (MICAH)	Wisconsin Veterans Chamber of Commerce
National Association of Minority Contractors (NAMC-WI)	
Approved List of Targeted Businesses Directories	
City of Milwaukee Small Business Enterprises (SBE) Business Directory	
Wisconsin Supply Chain Market Directory	
Wisconsin Unified Certification Program (WIUCP) DBE Directory	

Workforce Inclusion and Diversity Goals

WisDOT recognizes that the Local Development Agreement includes language to encourage local and disadvantaged business inclusion. As a result, the following workforce goals have been established that are consistent with Foxconn's inclusion goals for their project:

Wisconsin Resident Work Hours with an emphasis on Racine County Residents	70%
Minorities or People of Color* *Minorities or People of Color as defined: American Indian or Alaska Native – Asian – Black or African American – Hispanic or Latino – Native Hawaiian or Other Pacific Islander. *Federal Register/Vol. 62, No. 210*	10% Combined
Women	
Veterans	

The bidder should make every feasible effort to provide economic opportunities to workforce candidates. The submission of a Wisconsin Utilization Plan affirms the Bidder will have implemented inclusionary measures to engage workforce intermediaries which include the following:

Approved List of Workforce Intermediaries
Human Asset Development Corporation (HADC) First Choice Pre-Apprenticeship Training
Wisconsin Regional Training Partnership WRTP/BIG STEP
Racine Campus of Gateway Technical College

Post-Award

The following two actions will be requested of the awarded contractor:

- **Affirmation of business inclusion plan:**

Within five calendar days of contract award, affirm the participation of the targeted businesses who have been identified in the Wisconsin Utilization Plan. Submit separate Wisconsin Inclusion Agreement(s) for each individual business or organization being utilized. Submit to the Wisconsin Department of Transportation: Attn: Beth Cannestra at dotdtsdbpd@dot.wi.gov

- **Monitoring of workforce inclusion plan:**

The awarded contractor is required to submit weekly certified payrolls by utilizing WisDOT's Civil Rights Compliance System (CRCS) for workforce analysis purposes only.

5. Prosecution and Progress.

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

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

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

The contract time for completion, including interim completion dates, is based on an expedited work schedule and may require extraordinary forces and equipment due to enhanced coordination efforts with adjacent site developments and utility installation.

Be advised that there may be multiple mobilizations and/or remobilizations to complete construction operations, for example such items as: grading, concrete pavement repair/replacement, paving, traffic control, signing, temporary and permanent pavement marking, finishing items and other incidental items. No additional payment will be made, by the department, for additional mobilizations.

Complete all pavement marking, signage and open all traffic lanes in all directions by November 15. During Winter shutdown all traffic lanes in all directions will be open to traffic. Winter Shutdown will commence with the completion of all the roadway grading and paving except for plantings and restoration in the fall of 2019. Do not resume work until April 15, 2020 unless approved by the engineer. Provide a start date in writing at least 14 days prior to the planned start of construction in 2020. Upon approval the engineer will issue the notice to proceed within 10 days of the approved start date.

Interim and Final Completion of Work

Supplement standard spec 108.10 with the following:

The department will not grant time extensions for the following:

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

sef-108-015 (20171004)

Winter weather work, grading, excavation of frozen ground, high ground water, dewatering and mitigation efforts for high water table elevations shall not be considered adverse weather delays to construction. Cost for dewatering is considered incidental to construction.

Anticipate cold weather and early spring concrete masonry, concrete paving and ancillary concrete work (curb, median barrier, etc.). Plan to heat aggregates and water for mixes, and that the heating of the aggregate and water is considered incidental to those concrete items. There will be no adverse weather delay for cold weather construction.

Braun Road will be closed within project limits for majority of construction.

A Schedule of Operations

The department anticipates that the schedule for each stage shall be as follows below, unless modifications are approved in writing by the engineer.

Coordinate traffic control and work operations with other projects listed under the article Other Contracts.

After reopening Braun Road and Wisconn Valley Way to traffic in the Fall of 2019, the following lane closures are permitted.

Permitted Closures		
	Closure Type	
Roadway	1-lane	Full Closure
Braun Road	6:00 AM to 8:59 PM	9:00 PM to 5:59 AM
Wisconn Valley Way	6:00 AM to 8:59 PM	9:00 PM to 5:59 AM

Stage 1

Construct Wisconn Valley Way and Braun Road. Stage 1 activities include:

1. Braun Road may be closed during Stage 1
2. Begin construction of Wisconn Valley Way
3. Construction of Braun Road
4. Construction of Wisconn Valley Way/Braun intersection
5. Construction of storm water Pond I, Pond J and Pond K

Stage 2

Braun Road shall reopen to traffic. Construction on Wisconn Valley Way continues. Stage 2 activities include:

1. Completing construction of Wisconn Valley Way roadway.

Stage 3 – Winter Shutdown

Wisconn Valley Way shall be open to the ultimate traffic configuration during the winter. No construction activities occur.

Stage 4

Wisconn Valley Way shall be open to the ultimate traffic configuration. The Wisconn Valley Way median lane may be closed at the worksite to provide construction access. Stage 4 activities include:

1. Place planting is bioswales.
2. Complete construction of Wisconn Valley Way

Winter Operations 2019/2020 – Restore through traffic operations along Wisconn Valley Way for all traffic. Contractor to coordinate winter maintenance operations per subsection C "Winter Maintenance" with local municipalities.

B Work Restrictions

Wetlands

There will be two separate Section 404 permits on this project – one pertaining to work along Wisconn Valley Way and Braun Road and one pertaining to work on the pond in the NE Quadrant of the CTH KR/IH 94/41 Interchange. Do not begin construction within wetland areas prior to the Section 404 permit being approved. Verify with the engineer that the permit is approved before starting construction in affected wetland areas. Anticipated permit approval date is March 1, 2019 for the Wisconn Valley Way and Braun Road area and is June 1, 2019 for the pond in the NE Quadrant of the CTH KR/IH 94/41 Interchange.

Work Zone Ingress/Egress.

Provide engineer approved signage and for access into and out of the work zones at locations approved by the engineer.

At the weekly traffic meetings, provide an Emergency Work Zone Access Plan and required updates, as approved by the engineer, to direct emergency responders accessing a mainline median barrier restricted work zone.

Locations of work zone egress or ingress for construction vehicles, other than as the plans show, is subject to approval from the engineer. All construction vehicles shall yield to all through traffic at all locations.

Migratory Birds

Swallow and other migratory birds' nests have been observed on or under the existing bridges. All active nests (when eggs or young are present) of migratory birds are protected under the Federal Migratory Bird Treaty Act.

The nesting season for swallows and other birds is usually between May 1 and August 30. Either prevent active nests from becoming established, or apply for a depredation permit from the US Fish and Wildlife Service for work that may disturb or destroy active nests. The need for a permit may be avoided by removing the existing bridge structure prior to nest occupation by birds, or clearing nests from all structures before the nests become active in early spring. As a last resort, prevent birds from nesting by installing a suitable netting device on the remaining structure prior to nesting activity.

Northern Long-eared Bat *(Myotis septentrionalis)*

Northern Long-eared Bats (NLEB) have the potential to inhabit the project limits because they roost in trees. Roosts have been identified within 150 feet of the project limits. The species and all active roosts are protected by the Federal Endangered Species Act. If an individual bat or active roost is encountered during construction operations, stop work and notify the engineer and the WisDOT Regional Environmental Coordinator (REC).

To avoid adverse impacts upon the NLEBs, no Clearing is allowed between June 1 and July 31, both dates inclusive.

If the required Clearing is not completed by May 31, the department will suspend all clearing and associated work directly impacted by Clearing. The department will issue a notice to proceed with Clearing and associated work directly impacted by clearing after consulting with the United States Fish and Wildlife Service (USFWS).

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

Rusty Patched Bumble Bee (*Bombus affinis*)

The rusty patched bumble bee (Bombus affinis) was listed as endangered by the U.S. Fish and Wildlife Service (USFWS) under the Endangered Species Act, effective March 21, 2017. Construction activities such as grading outside the mowed shoulder area have the potential to impact ground nests and wildflowers that may serve as a food source for the bee. If an active rusty-patched bumblebee nest is encountered in construction areas, contact the WisDOT Regional Environmental Coordinator, who will coordinate with USFWS.

C Winter Maintenance.

Kenosha County will perform snow removal operations for CTH KR. Racine County will perform snow removal operations for STH 11. Provide for snow removal in those areas closed to traffic as required to facilitate safe construction operations and as required to eliminate snow melt run-off from crossing active roadways. Provide Racine and Kenosha County Highway Maintenance and Kenosha & Racine County Sheriff's Department with a 24-hour emergency contact number for when maintenance is required. Contractor to perform snow removal operations for Wisconn Valley Way.

sef-999-060 (20120330)

D Enhanced Coordination

The project limits include numerous utilities that are large in size that parallel the entire length of the project limits. East of Braun Road will be under construction with expansive site development which will be adding trucking to the project limits. Time extensions shall not be granted for delays incurred due to utility installation or due to providing access for site development traffic. Ensure these elements are accounted for when determining the construction schedule.

Interim Completion: (July 31, 2019)

If the contractor fails to complete construction of Pond K, including associated outfall structure and pipes, and the 60-Inch storm sewer trunk line from Pond K to the north project limits prior to 12:01 AM August 1, 2019, the department will assess the contractor $5,000 in interim liquidated damages for each calendar day contract work remains incomplete beyond 12:01 AM August 1, 2019. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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.

Interim Completion: (October 15, 2019)

If the contractor fails to complete all the roadwork at Wisconn Valley Way and Braun Road Intersection to completely open Braun Road east and west to through traffic between the East Frontage Road and eastern project limits prior to 12:01 AM October 16, 2019, the department will assess the contractor $5,000 in interim liquidated damages for each calendar day contract work remains incomplete beyond 12:01 AM October 16, 2019. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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.

Interim Completion: (November 30, 2019)

If the contractor fails to complete all work required to open Wisconn Valley Way to traffic as shown in Stage 3 of the plans prior to 12:01 AM December 1, 2019, the department will assess the contractor $5,000 in interim liquidated damages for each calendar day contract work remains incomplete beyond 12:01 AM December 1, 2019. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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.

E Control of Water

The design, furnishing of all labor and material needed to control, handle, dispose and treat groundwater and surface water that may be encountered in all excavations is considered incidental to construction.

6. Lane Rental Fee Assessment.

A General

The contract designates some lane closures to perform the work. The contractor will not incur a Lane Rental Fee Assessment for closing lanes during the allowable lane closure times. The contractor will incur a Lane Rental Fee Assessment for each lane closure outside of the allowable lane closure times. If a lane is obstructed at any time due to contractor operations, it is considered a closure. The purpose of lane rental is to enforce compliance of lane restrictions and discourage unnecessary closures.

Lane rental assessment will not apply to long term closure of Braun Road as shown in the plans.

The allowable lane closure times are shown in the Prosecution and Progress article.

Submit the dates of the proposed lane or driveway access restrictions to the engineer as part of the progress schedule.

Coordinate lane or driveway access restrictions with any concurrent operations on adjacent roadways within 3 miles of the project. If other projects are in the vicinity of this project, coordinate lane closures to run concurrent with lane closures on adjacent projects when possible. When lane closures on adjacent projects extend into the limits of this project, Lane Rental Fee Assessments will only occur if the closure facilitates work under this contract.

B Lane Rental Fee Assessment

The Lane Rental Fee Assessment incurred for each lane closure, each access closure, and each full closure of a roadway, is as follows:

- Wisconn Valley Way and Braun Road lanes to 1 lane: $5,000 per hour broken into 15-minute increments.
- Wisconn Valley Way and Braun Road lanes to Full Closure: $10,000 per hour broken into 15-minute increments.

The Lane Rental Fee Assessment represents a portion of the cost of the interference and inconvenience to the road users for each closure. All lane closure event increments 15 minutes and less will be assessed as a 15-minute increment.

The engineer, or designated representative, will be the sole authority in determining time period length for the Lane Rental Fee Assessment.

Lane Rental Fee Assessments will not be assessed for closures due to crashes, accidents or emergencies not initiated by the contractor.

The department will assess Lane Rental Fee Assessment by the dollar under the administrative item Failing to Open Road to Traffic. The total dollar amount of Lane Rental Fee Assessment will be computed by multiplying the Lane Rental Assessment Rate by the number of 15-minute increments of each lane closure event as described above.

Lane Rental Fee Assessment will be in effect from the time of the Notice to Proceed until the department issues final acceptance. If interim completion time or contract time expires prior to the completion of specified work in the contract, additional liquidated damages will be assessed according to standard spec 108.11 or as specified within this contract.
stp-108-070 (20161130)

7. Traffic.

General

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

Maintain access at all times to all driveways located along within the project limits unless otherwise noted in the plans. Notify the property occupant five days in advance of the driveway reconstruction to verify closure or staged driveway construction methods.

Coordinate traffic requirements under this contract with other adjacent and concurrent department or local municipality projects. Implement and coordinate with other contractors all traffic control as shown on the plans. Modifications to the traffic control plan may be required by the engineer to be safe and consistent with adjacent work by others.

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

Do not store equipment, vehicles, or materials on adjacent streets beyond the project limits without specific approval of the engineer.

Wisconsin Lane Closure System Advance Notification

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

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

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date.

stp-108-057 (20161130)

Notify the engineer and Construction Program Work Zone and Traffic Engineer if there are any changes in the schedule, early completions, or cancellations of scheduled work.

Staging

Perform construction operations on Wisconn Valley Way and Braun Road in stages as shown in the traffic control/construction staging plan. The construction stages are:

Stage 1

Wisconn Valley Way shall be closed to traffic. Braun Road shall be closed to through traffic. CTH KR and STH 11 shall remain open to traffic.

Stage 2

Wisconn Valley Way shall be closed to traffic. Braun Road shall be open to traffic in the ultimate configuration. CTH KR and STH 11 shall remain open to traffic.

Stage 3 – Winter Shurtdown

Wisconn Valley Way shall be open to traffic in the ultimate configuration. Braun Road shall be open to traffic. CTH KR and STH 11 shall remain open to traffic.

Stage 4

Wisconn Valley Way shall be open to traffic. The Wisconn Valley Way median lane may be closed at the work site to provide construction access. Braun Road shall be open to traffic. CTH KR and STH 11 shall remain open to traffic.

8. Traffic Meetings and Traffic Control Scheduling.

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

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

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

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

9. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying CTH KR and STH 11 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, May 24, 2019 to 6:00 AM Tuesday, May 28, 2019 for Memorial Day;
- From noon Wednesday, July 3, 2019 to 6:00 AM Monday, July 8, 2019 for Independence Day;
- From noon Friday, August 30, 2019 to 6:00 AM Tuesday, September 3, 2019 for Labor Day;
- From noon Wednesday, November 27, 2019 to 6:00 AM Monday, December 2, 2019 for Thanksgiving;
- From noon Tuesday, December 24, 2019 to 6:00 AM Thursday, January 2, 2020 for Christmas and New Year's Day;
- From noon Friday, May 22, 2020 to 6:00 AM Tuesday, May 26, 2020 for Memorial Day.

stp-107-005 (20050502)

Holiday work restrictions do not apply to roadways or ramps already closed long term during construction as shown on the plans. New long-term closures of ramps and roadways must be coordinated with the holiday work restrictions.

10. Work Restrictions.

Comply with all local ordinances that apply to local street work operations, including those pertaining to working from 9:00 PM to 7:00 AM. If required to work outside of the allowable timeframes, furnish any ordinance variance or required permits to the engineer in writing 3 days before performing this work. Do not perform any work that violates local ordinance prior to obtaining written approval from the engineer.

11. Utilities.

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

Additional information regarding proposed and/or recently relocated utility facilities may be available on permits issued to the utility companies. These permits can be viewed at the Region Office during normal working hours. Contact WisDOT SE Freeways Utility Coordinator Greg Berry at (414) 750-7828 for further information

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

Some utility work, as described below, is dependent on prior work being performed by the contractor at a specific site. Provide the engineer and the affected utility a good-faith notice of when the utility is to start work at the site. Notice shall be given 14 to 16 calendar days in advance of when the site will be available to the utility. Follow up with a confirmation notice to the engineer and the utility not less than 3 working days before the site will be ready for the utility to begin its work.

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

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

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

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

Known utilities in the project area are as follows:

AT&T Wisconsin has existing overhead and underground communications facilities within the project limits in the following locations:

- An existing overhead communications line on We Energies poles beginning beyond the westerly project limits and running easterly along the existing northerly Braun Road right-of-way, crossing Wisconn Valley Way at Station 557+06, and continuing easterly to beyond the project limits. AT&T will remove this line prior to construction.
- An existing overhead communications line on We Energies poles beginning at a pole at Station 54BRW+71, 16'LT and running northwesterly to beyond the northerly project limits. AT&T will remove this line prior to construction.
- An underground communication line beginning beyond the westerly project limits and running northeasterly to Station 54BRW+65,55'RT where it turns and runs northerly, crossing Braun Road at Station 54BRW+66, and continues northerly and ends at a pole at Station 54BRW+71, 16'LT. This existing line will be discontinued in place.

Contact Jeff Oldenburg, (262) 896-7522, of AT&T Wisconsin 7 days in advance to coordinate locations and any excavation near their facilities.

Mount Pleasant, Village of – Sanitary has no existing sanitary sewer facilities within the project limits.

Prior to and during construction, the Village of Mount Pleasant will construct new sanitary sewer facilities beginning beyond the southerly project limits at a manhole at Station 501+20, 129.9'RT and running northerly to Braun Road with manholes approximately 18' to 30' east of the proposed easterly Wisconn Valley Way right-of-way. The manholes will be constructed at Station 503+76, 140'RT; Station 505+12, 140'RT; Station 507+88, 140'RT; Station 511+65, 140'RT; Station 515+65, 140'RT; Station 519+65, 140'RT; Station 523+65, 140'RT; Station 528+95, 133'RT; Station 531+58, 133'RT; Station 535+81, 140'RT; Station 539+81, 140'RT; Station 542+76, 129'RT; Station 545+92, 131'RT; Station 549+72, 140'RT; Station 552+63, 165'RT; and Station 554+93, 165'RT. The sanitary sewer will continue running northerly crossing Braun Road at Station 71BRW+03 to a manhole at Station 558+25, 140'RT. From there it will continue running northerly with manholes approximately 18' to 30' east of the proposed easterly Wisconn Valley Way right-of-way and will end at Station 590+18, 140'RT. The manholes north of Braun will be constructed at Station 558+25, 140'RT; Station 560+41, 140'RT; Station 562+85, 140'RT; Station 565+25, 140'RT; Station 569+12, 140'RT Station 572+81, 128'RT; Station 576+62, 128'RT; Station 584+04, 32'RT; Station 585+20, 140'RT; and Station 590+18, 140'RT. Construction of the sanitary sewer along Wisconn Valley Way is anticipated to begin October 2019 and be completed June 2020.

Contact Anthony Beyer, (262) 664-7849, of Village of Mount Pleasant 7 days in advance to coordinate construction, locations and any excavation near their facilities.

Racine Water Works Commission (RWWC) has no existing water facilities within the project limits.

Prior to and during construction, RWWC will construct new underground water facilities in the following locations:

- A new water main beginning at Station 555+24, 94'LT and running northerly crossing Braun Road at Station 68BRW+55, and continuing northerly along a line 16' east of and parallel to the proposed westerly Wisconn Valley Way right-of-way, to beyond the project limits. Construction of the water main along Wisconn Valley Way is anticipated to begin January 2019 and be completed April 2019.
- A new water main beginning at Station 67BRW+73, 61'LT and running easterly along a line 21'south of and parallel to the proposed northerly Braun Road right-of-way, crossing Wisconn Valley Way at Station 557+49, and continuing easterly along a line 33' south of and parallel to the proposed northerly Braun Road right-of-way to beyond the project limits. Construction of the water main along Braun Road is anticipated to begin October 2018 and be completed April 2019.

Contact Chad Regalia, (262) 497-4611, of Racine Water Works Commission 7 days in advance to coordinate locations and any excavation near their facilities.

We Energies – Electric has existing overhead electric facilities within the project limits in the following locations:

- An existing overhead line beginning beyond the westerly project limits and running easterly along the existing northerly Braun Road right-of-way, crossing Wisconn Valley Way at Station 557+06, and continuing easterly to beyond the project limits. We Energies will remove this line prior to construction.
- An existing overhead line beginning at a pole at Station 54BRW+71, 16'LT and running northwesterly to beyond the northerly project limits. We Energies will remove this line prior to construction.
- An existing overhead line beginning beyond the westerly project limits and running northeasterly to a pole at Station 600+32, 33'LT. From there it runs easterly to a pole at Station 600+33, 101.1'RT where it turns and runs northerly to beyond the project limits. We Energies will remove this line prior to construction

Contact Dan Toomey, (414) 944-5695 office / (414) 254-8459 cell, of We Energies 7 days in advance to coordinate locations and any excavation near their facilities.

We Energies – Gas has no existing gas facilities within the project limits.

Prior to and during construction, We Energies will construct new gas mains in the following locations:

- A new low-pressure gas line beginning beyond the southerly project limits and running northerly along a line 8'east of and parallel to the proposed westerly Wisconn Valley Way right-of-way, crossing Braun Road at Station 68BRW+47, and continuing northerly along said parallel line to beyond the northerly project limits. Construction of this low-pressure gas line is anticipated to begin March 2019 and be completed August 2019.
- A new low-pressure gas line beginning at a tee at Station 557+62, 102'LT and running easterly, crossing Wisconn Valley Way at Station 557+62, and continuing easterly along a line 20' south of and parallel to the proposed northerly Braun Road right-of-way to beyond the easterly project limits. Construction of this low-pressure gas line is anticipated to begin December 2018 and be completed January 2019.

Contact Dan Toomey. (414) 944-5695 office / (414) 254-8459 cell, of We Energies 7 days in advance to coordinate locations and any excavation near their facilities.

12. Other Contracts.

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

It is expected that routine maintenance by the city and county personnel may be required at certain times concurrently with the work being done under this contract.

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

2018 -2019

IH 94 N-S Freeway Mainline Construction STH 20 to CTH G Contract:

ID 1030-11-72, CTH K Mainline and Ramps

ID 1030-11-79, STH 20 to CTH K Mainline (North)

ID 1030-11-80, STH 20 to CTH K Mainline (South)

ID 1030-25-79, CTH K to CTH G Mainline

2018 - 2020

IH 94 N-S Freeway Mainline construction CTH G to College Ave Contract:

ID 1035-01-79, IH 94 N-S Freeway, CTH G to 7 Mile Road

ID 1035-01-72, IH 94 N-S Freeway, 7 Mile Road Interchange, 7 Mile Road

ID 1035-01-74, IH 94 N-S Freeway, 7 Mile Road Interchange, Mainline and Ramps

ID 1035-01-82, IH 94 N-S Freeway, 7 Mile Road to Milwaukee County Line

ID 1030-20-87, IH 94 N-S Freeway, County Line to Oakwood Rd, Elm Rd Interchange

ID 1030-20-84, IH 94 N-S Freeway, Oakwood Rd to College Ave

2018-2021

Development Roads

ID 1320-23-70, STH 11, EFR to WVW (2019)

ID 1320-23-73, STH 11, WVW to CTH H (2019)

ID 1320-23-71, STH 11, CTH H intersection (2019-2020)

ID 1320-23-72, STH 11, 56th Road to WFR (2021)

ID 2704-00-78 Wisconn Valley Way Box Culvert (Sept 2018 Sept -January 2019)

ID 2704-00-77, Wisconn Valley Way/CTH KR intersection (2018-2019)

ID 2704-00-76, Wisconn Valley Way, CTH KR to STH 11 (2018-2019)

ID 2704-00-75, International Drive, STH 11 to STH 20 (2018 - 2019)

ID 2704-09-70, Braun Road, EFR to CTH H (2018 - 2019)

ID 2704-09-71, Braun Road, CTH H to 90th Street (2021)

ID 3763-00-75 CTH KR, Kilbourn Road Box Culvert (Sept 2018 Sept -January 2019)

ID 3763-00-73, CTH KR, EFR to CTH (2018-2019)

ID 3763-00-74, CTH KR, CTH H to Old Green Bay Road (2021-2022)

ID 3760-00-70, CTH H, CTH KR to Braun Road (2019-2020
ID 3760-00-71, CTH H, Braun Road to STH 11 (2019-2020)

ID 2704-00-79, Development Roads Shared Use Paths (2020)

ID 2704-00-80, Development Roads Landscaping (2020)
ID 2704-00-81, Development Roads Continuous Above Ground Lighting (2020)

ID 3760-00-70, CTH H, CTH KR to Braun Road (2019)

13. Information to Bidders, WPDES General Construction Storm Water Discharge Permit.

The department has obtained coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities of this contract under the Wisconsin Pollutant Discharge Elimination System General Construction Storm Water Discharge Permit (WPDES Permit No. WI-S066796-1). A certificate of permit coverage is available from the regional office by contacting Steve Hoff at (262) 548-6718. Post the permit in a conspicuous place at the construction site.

stp-107-056 (20180628)

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

The department is obtaining a U.S. Army Corps of Engineers Section 404 permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit application is available from the regional office by contacting Dobra Payant at (414) 750-2677. Do not being any work activities in affected wetlands prior to 404 permit being obtained. See article *Prosecution and Progress* for anticipated date.

15. Construction Over or Adjacent to Navigable Waters.

Add the following to standard spec 107.19:

The waterways at the following locations are classified as state navigable waterways.

Project	Location	County	Structure No.
2704-00-77 (previously constructed)	Wisconn Valley Way Over a Tributary to Kilbourn Road Ditch	Racine County	C-51-85
2704-00-76	Wisconn Valley Way Unnamed Tributary	Pipe Culverts	NA

stp-107-060 (20150630)

16. Environmental Protection, Aquatic Invasive Species Control.

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

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

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

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

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

17. Erosion Control

Add the following to standard spec 107.20:

Erosion control best management practices (BMP's) the plans show are at suggested locations. The actual locations shall be determined by the contractor's ECIP and by the engineer. Include each dewatering (mechanical pumping) operation in the ECIP submittal. The ECIP shall supplement

information the plans show and not reproduce it. The ECIP shall identify how to implement the project's erosion control plan. ECIP shall demonstrate timely and diligently staged operations, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-application of top soil to minimize the exposure to possible erosion.

Additional devices may be needed based on sequence of operations and field conditions. A 'staged' ECIP may be required for this project, as new areas are disturbed. Each new 'stage' of the ECIP needs to be submitted to the project staff and the WDNR liaison for review as an amendment to the ECIP with a standard 14-day review period. Work should not commence in new areas until the project staff and WDNR has reviewed and concurred with the corresponding ECIP amendment.

Provide the ECIP 14 days before the pre-construction conference. Provide 1 copy of the ECIP to the department and 1 copy of the ECIP to the WDNR Liaisons Kristina Betzold, (414) 263-8517, Kristina.betzold@wisconsin.gov, and Craig Webster, (262) 574-2141, craig.webster@wisconsin.gov. Do not implement the ECIP until department approval, and perform all work conforming to the approved ECIP.

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

Stockpile excess materials or spoils on upland areas away from wetlands, floodplains, and waterways. Install perimeter silt fence protection around stockpiles within a timeframe acceptable to the engineer. If stockpiled materials will be left for more than 14 days, install temporary seed and mulch or other temporary erosion control measures the engineer orders. Show the proposed stockpile locations in the ECIP.

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

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

All dewatering, including treatment to remove suspended solids, not covered under bid items is incidental to the contract.

The project team may identify 'sensitive' areas in the field that require additional temporary stabilization to protect resources from being contaminated by sediment-laden water discharging from the work site. Any 'release' of sediment-laden water from the work site that enters a wetland or waterway should be reported to the WDNR liaison within 24 hours.

The contractor shall restrict the removal of vegetative cover and exposure of bare ground to the minimum amounts necessary to complete construction. Restoration of disturbed soils should take place as soon as conditions permit. If sufficient vegetative cover will not be achieved because of late season construction, the site must be properly winterized. A plan for 'over-wintering' the project or a specific project area should be compiled and submitted to the project staff and WDNR for review in an amendment to the ECIP.

The DOT Select Site process must be adhered to for clean fill or any other material that leaves the work site. The project staff and the WDNR liaison will review all proposed select sites and a site visit may be required. Filling of wetlands, waterways or floodplain is not allowed under the select site process, unless the site owner has proof of required local/state/federal permits. No new impermeable surfaces can be left at a select site (including gravel roads or pads), unless the site owner attains required permits. Contaminated materials leaving the site need to adhere to the Hazardous Material Management Plan.

Construction materials and debris, including fuels, oil, and other liquid substances, will not be stored in the construction area in a manner that would allow them to enter a wetland or waterbody as a result of spillage, natural runoff, or flooding. If a spill of any potential pollutant should occur, it is the responsibility

of the permittee to remove such material, to minimize any contamination resulting from this spill, and to immediately notify the State Duty Officer at 1-800-943-0003.

Construction of structures over navigable waterways shall be completed as quickly as possible in order to minimize disruption. Construction shall minimize the removal of shoreline vegetation below the ordinary high water mark (OHWM), unless otherwise directed by the WDNR Transportation Liaison. Construction equipment should not operate on the bed of the stream or below the OHWM, except for that which is necessary for the placement of the structure. The contractor must provide a means of separating the live flow channel of the waterway from disturbed areas (cofferdam, turbidity barrier, etc.). Any plan for diverting the flow of a navigable waterway (listed under Fish Spawning provision) needs to be submitted, reviewed and approved by the project staff and the WDNR liaison according to the article Temporary Water Diversion Culvert B-51-160.

If erosion mat is used along stream banks, DNR recommends that biodegradable non-netted mat be used (e.g. Class I Type A Urban, Class I Type B Urban, or Class II Type C). Long-term netted mats may cause animals to become entrapped while moving in and out of the stream. Avoid the use of fine mesh matting that is tied or bonded at the mesh intersection such that the openings in the mesh are fixed in size.

When performing concrete or asphalt sawcutting operations, the slurry shall be squeegeed off to the shoulder gravel or shoveled into the gravel behind curbs and not allowed into storm sewers, ditches, waterways or wetlands.

18. Dust Control Implementation Plan.

A Description

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

B (Vacant)

C Construction

C.1 General

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

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

C.2 DCIP Contents

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

Include all of the following:

- A single contact person with overall responsibility for the DCIP development as well as surveillance and remediation of job related dust. Provide:
    - Name, firm, address, and working-hours phone number.
    - Non-working-hours phone number.
    - Email address.

- A site map locating project features, the job site boundaries, all ingress and egress points, air intakes and other dust-sensitive areas, and all public and private paved surfaces within and adjacent to the job site. Show where specific land disturbing, dust generating activities will occur and, to the extent possible, where employing various dust control or prevention strategies.

- A matrix, or plan, for each anticipated land disturbing, dust generating activity, showing the following:
    - Preventive measures that shall be employed.
    - The applicable contact person.
    - The contractor's timetable and surveillance measures used to determine when remediation is required.
    - The specific dust control and remediation measures that shall be employed. Identify the specific contract bid items that shall be used for payment. Indicate costs and practices that are incidental to the contract.
    - Both maintenance and cleanup schedules and procedures.
    - Excess and waste materials disposal strategy.

- A description of monitoring and resolving off-site impacts.

C.3 Updating the DCIP

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

C.4 Dust Control Deficiencies

Coordinate with engineer to determine deadlines for resolving dust control deficiencies. Deficiencies include actions or lack of actions resulting in excessive dust, non-compliance with the contractor's DCIP or associated special provisions, and not properly maintaining equipment.

D Measurement

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

Measurement under the DCIP includes the contract bid items listed in this special provision:

623.0200	Dust Control Surface Treatment
624.0100	Water
628.7560	Tracking Pads
SPV.0075.001	Pavement Cleanup Project 2704-00-76

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

E Payment

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

sef-107-005 (20170323)

19. Project Site Air Quality

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

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

Portable Concrete Crusher Plants

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

sef-999-039 (20160929)

20. Maintaining Drainage.

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

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

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

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

Dewatering (Mechanical Pumping) for treatment Water (sediment-laden) Operations

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

sef-107-016 (20170310)

21. Hauling Restrictions.

Replace standard spec 107.2 with the following:

Prior to hauling any materials to or from the project, all trucking providers will be required to attend a mandatory pre-haul conference. The purpose of the pre-haul conference is to discuss specific project hauling requirements, placard implementation, weekly haul forecasting and reporting, and the processes required to secure approvals for any hauling routes not shown in the plan. Attendance of this conference is considered incidental to the work. Any trucking provider not attending the pre-haul conference will not be allowed to haul for the project.

The department will provide placards at the pre-haul conference for all trucks hauling materials to and from the project. These placards must be displayed on the dash when actively hauling for the project. Additional placards can be picked up at the Development Roads field office. Obtaining, distributing, and placement of the placards as well as implementation of the placard system is considered incidental to the work.

Provide a forecast of the following week's hauling activities by 10:00 AM each Wednesday. The hauling forecast shall include the following information for each individual haul route for each day's hauling activities: the number of trucks hauling, the number of overall truck trips, the hours in operation, and the type of material being hauled. The haul route includes all roadways utilized between the material source/waste site and the project. The hauling forecast shall not combine haul routes. The department will provide a spreadsheet format for use in forecast reporting. The weekly hauling forecast and reporting is considered incidental to the work.

Approved local street haul routes are shown in the plan.

If additional haul routes are needed that are not shown in the plan, or part of the state trunk highway system, submit a New Haul Route Request Form detailing any additional haul routes three business days in advance of any proposed hauling to the department. Include the months, days of the week, time of day,

number of trucks, types of trucks and maximum loads of trucks anticipated to accomplish the project work. The New Haul Route Request Form can be found on the department's 511 website at the address listed below.

https://projects.511wi.gov/fdr/trucking/

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

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

22. Public Involvement Meetings.

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

sef-999-040 (20160915)

23. Program Partnering Meetings Monthly.

The department will implement mandatory monthly program partnering meetings involving various stakeholders in and around the Foxconn development site corridor. The meetings will involve leadership staff from the following entities: contractor, department, adjacent site development, utilities, local officials, and adjacent department contracts. The meetings will occur monthly from project start until the contractor accepts the tentative final estimate. The department may invite other attendees if deemed appropriate.

This meeting is intended to facilitate cooperation and coordination of construction activities within and surrounding the Wisconn development site corridor. Meeting topics may include:

- Schedule updates
- Hauling coordination
- Site development access
- Public/private project interface issues
- Utility progress
- Safety
- Local official concerns
- Public outreach
- Traffic management

All costs are incidental to contract work.

24. Partnering Meetings Monthly.

A Description

The department will implement mandatory monthly leadership partnering meetings. Unless the department and contractor agree otherwise, the contractor, project design engineers, and department field personal shall meet monthly from project start until the contractor accepts the tentative final estimate. The contractor and department field personal may mutually agree to invite other attendees.

This meeting is intended to facilitate a cooperative team environment that defines roles and responsibilities, determines common goals and objectives, and provides a platform to build trust and accountability. Meeting topics may include:

- Issue and risk management
- Dispute resolution procedures
- Safety
- Public outreach
- Traffic management

- Cost reducing incentives
- Claim resolution
- Scheduling issues
- Quality control

All costs are incidental to the contract work.

sef-108-040 (20171004)

25. Notice to Contractor – Personnel Identification Program.

All contractor personnel will be required to register in the program prior to performing work. Valid photo identification which includes unexpired driver's license, government issued identification cards, military identification, passport, or other identification approved by the department will be required to register. All personnel registered will be issued a hard sticker with an identification number by the department. Stickers shall be placed in a visible location on the hard hat.

Noncompliance with this contract provision may result in removal of contractor personnel from the project or suspension of work according to standard spec 108.6.

26. Notice to Contractor – Media Relations.

a) The contractor shall not disseminate or publicize this Agreement, information relating to this Agreement, their work responsibilities, or generally comment about the entire project without prior written consent from one of the department's designated Project Communications Leaders listed under Section (d).
b) The contractor shall refer all information requests or interview requests made by external parties, including media sources, to all of the department's designated Project Communications Leaders listed under Section (d).
c) The contractor agrees to coordinate with the department as to the form, content and timing of any public announcement of this Agreement.
d) The Project Communications Leaders for the department shall be:

i. The department's Project Manager

ii. Becky Kikkert
4802 Sheboygan Avenue
Madison, WI 53705
Phone: (608) 266-3581
Email: rebecca.kikkert@dot.wi.gov

iii. Michael Pyritz
141 NW Barstow Street
P.O. Box 798
Waukesha, WI 53188
Phone: (262) 521-5373
Email: michael.pyritz@dot.wi.gov

e) Noncompliance with this contract provision may result in removal of contractor personnel from the project or suspension of work according to standard spec 108.6.
f) Notwithstanding anything to the contrary contained herein, no provision of this Agreement shall be interpreted to impede the contractor, or any individual, from reporting possible violations of state or federal law to any governmental agency or entity, or from making other disclosures under the whistleblower provisions of state or federal law. The contractor does not need the prior authorization of the department to make any such reports or disclosures and the contractor shall not be required to notify the department that such reports or disclosures have been made.

27. Notice to Contractor- Safety

All workers shall wear OSHA and ANSI compliant safety head protection, safety glasses, safety-toe protective footwear, and safety vest at all times while within the project footprint.

The contractor and respective subcontractors shall provide a copy of their current Company Safety Plans to the department at the preconstruction meeting. All workers shall comply with the Safety Plans of their employer.

Noncompliance with this contract provision may result in removal of contractor personnel from the project or suspension of work according to standard spec 108.6.

28. Notice to Contractor – Great Lakes Compact.

This project is near, or may cross, the Subcontinental Divide which is the watershed boundary of the Great Lakes basin and the Mississippi River basin. The Great Lakes Compact and Wisconsin State Statutes regulate water use in the Great Lakes basin and ban diversion of Great Lakes water, with limited exceptions. Source water obtained from the Mississippi River basin may be released on portions of the project located within the Mississippi River basin or the Great Lakes Basin. Source water obtained from the Great Lakes basin may only be released within the Great Lakes basin. Submit all water sources and plans for use to the department for review and approval prior to use on the project. Source water permanently incorporated into a product (e.g., concrete masonry) is exempt from the requirements of this special provision if the product is made within the Great Lakes basin.

29. Material and Equipment Staging.

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

sef-999-020 (20170310)

Material and staging areas off the project limits shall be included in the ECIP for review.

30. Contractor Notification.

Replace standard spec 104.2.2.2(2) with the following:

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

104.3.2 (Vacant)

104.3.3 Contractor Initial Written Notice

Replace standard spec 104.3.2 and 104.3.3 with the following:

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

a) A written description of the nature of the issue.
b) The time and date of discovering the problem or issue.
c) If appropriate, the location of the issue.

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

sef-104-005 (20141211)

31. Available Documents.

The department will make its information available to bidding contractors. The list of documents that are available for contractors' information includes:

- Design Study Report
- Pavement Type Selection Report
- Environmental Document
- Preconstruction survey
- Traffic Management Plan

These documents are available from Steve Hoff at 141 NW Barstow Street, Waukesha, WI 53187, (262) 548-6718

Reproduction costs will be applied to all copies requested.

sef-102-005 (20170310)

32. Contractor Document Submittals.

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

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

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

Submit electronic copies in Portable Document Format (PDF) to the engineer-designated folder within the department's SharePoint site, and send alerts with a link to the document via email to (an) account(s) the engineer determines. If possible, translate original documents from their native format (e.g. Word, Excel, AutoCAD, etc.) using a Portable Document Format translation routine. Scan other documents to PDF format with a minimum resolution of 600 dpi.

All costs for contractor document submittals are incidental to the contract.

sef-105-010 (20150619)

33. Geotechnical Investigation Information.

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

Available information relative to subsurface exploration, borings, soundings, water levels, elevations or profiles are available for review at the department's Regions office. Contact Steve Hoff, 141 NW Barstow Street, Waukesha, WI 53187, (262) 548-6718.

Review the available information to determine if it is of use. The use or not of the geotechnical information does not relieve performing the work conforming to the plans and specifications.

34. CPM Progress Schedule.

Replace standard spec 108.4.4.1 with the following:

(1) Submit a CPM Progress Schedule and updates.
(2) To ensure compatibility with the Master Program Schedule, use the latest version of Primavera P6 Project Management, by Oracle Corporation, Redwood Shores, CA, to prepare the Initial CPM Progress Schedule, Monthly CPM Progress Updates and other CPM Progress Revisions requested by the engineer.
(3) Within five business days after award, the department will provide its current standard Work Breakdown Structure and activity codes to use to develop the Initial CPM Progress Schedule.
(4) Designate a Project Scheduler who will be responsible for scheduling the Work and submit a professional resume describing a minimum of three years of scheduling experience on interstate-highway reconstruction work of similar size and complexity, including recent experience with P6. Obtain approval of the submitted resume before scheduling the work.

Replace standard spec 108.4.4.4(2) with the following:

(2) For each schedule update, submit electronic copies in an approved format and updated PDF printouts of the following:

    1. Tabular sorts by:
        - Activity Identification/Early Start.
        - Total Float.
    2. If applicable, an updated logic diagram as the engineer requires.

3. If augmenting the CPM schedule with a linear schedule, provide an update of the linear schedule.
4. Activities underway and as-built dates for the past month.
5. Agreement on the as-built dates with the department depicted in the Monthly CPM Progress Schedule Update. Document all disagreements. Use the as-built dates from the Monthly CPM Progress Schedule Update for the month when updating the CPM schedule.
6. Actual as-built dates for completed activities through final acceptance of the project.

sef-108-010 (20171004)

35. Control of Materials

Delete paragraph 1 of standard spec 106.2.1 Waste Materials.

36. Intelligent Transportation Systems (ITS) – Control of Materials.

Standard spec 106.2 – Supply Source and Quality

Add the following to standard spec 106.2:

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

Department-Furnished Items
Fiber Optic Cable
Fiber Optic Splice Enclosures
CCTV Cameras

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

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

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

Standard spec 106.3 – Approval of Materials

Add the following to standard spec 106.3:

Design/Shop Drawings

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

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

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

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

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

stp-670-005 (20150630)

37. Subletting the Contract.

Replace standard spec 108.1.1 (3) with the following:

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

sef-108-035 (20171004)

38. Force Account.

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

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

sef-109-005 (20141211)

39. Clearing and Grubbing, Emerald Ash Borer.

This applies to projects in the emerald ash borer (EAB) quarantined zones to include: Adams, Brown, Buffalo, Calumet, Columbia, Crawford, Dane, Dodge, Door, Douglas, Fond du Lac, Grant, Green, Iowa, Jackson, Jefferson, Juneau, Kenosha, Kewaunee, La Crosse, Lafayette, Manitowoc, Marquette, Milwaukee, Monroe, Oneida, Outagamie, Ozaukee, Portage, Racine, Richland, Rock, Sauk, Sheboygan, Trempealeau, Vernon, Walworth, Washington, Waukesha, Winnebago and Wood counties.

Supplement standard spec 201.3 with the following:

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

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

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

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

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

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

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

ATCP 21.17 Emerald ash borer; import controls and quarantine.

(1) Importing or Moving Regulated Items from Infested Areas; Prohibition.

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

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

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

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

(3) Inspected and Certified Items; Exemption.

Subsection (1) does not prohibit the shipment of a regulated item if a pest control official in the state or province of origin does all of the following:

a) Inspects the regulated item.
b) Certifies any of the following in a certificate that accompanies the shipment:

1. The regulated item originates from non−infested premises and has not been exposed to emerald ash borer.

2. The regulated item was found, at the time of inspection, to be free of emerald ash borer.

3. The regulated item has been effectively treated to destroy emerald ash borer. The certificate shall specify the date and method of treatment.

4. The regulated item is produced, processed, stored, handled or used under conditions, described in the certificate, that effectively preclude the transmission of emerald ash borer.

Regulatory Considerations

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

Chipped Ash Trees

a) May be left on site if used as landscape mulch within the project limits. If used as mulch on site, chips may not be applied at a depth greater than standard mulch applications as this will impede germination of seeded areas.
b) May be buried on site within the right-of-way according to standard spec 201.3 (14).

c) May be buried on adjacent properties to projects within the quarantined zone with prior approval of the engineer according to standard spec 201.3 (15).
d) May be trucked to a licensed landfill within the quarantined zone with the engineer's approval according to standard spec 201.3 (15).
e) Burning chips is optional if in compliance with standard spec 201.3.
f) Chips must be disposed of immediately if not used for project mulching and may not be stockpiled and left on site for potential transport by others. Chips may be stockpiled temporarily if they will be used for project mulching and are not readily accessible to the public.
g) Chipper equipment must be cleaned following post-chipping activities to ensure no spread of wood chip debris into non-quarantined counties.

Ash logs, Branches, and Roots

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

Furnishing and Planting Plant Materials

Supplement standard spec 632.2.2 with the following:

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

Updates for Compliance

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

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

Regulated Items

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

SER-201.1 (20160808)

40. Removing or Abandoning Miscellaneous Structures.

Replace standard spec 204.5.1(3) with the following:

When backfilling with Backfill Granular as specified in this special provision article or as directed by the engineer, the item Backfill Granular is considered incidental to the appropriate bid item.

At locations where Backfill Granular is not specified, contractor may choose to use either Backfill or Backfill Granular, and no separate payments will be made for using Backfill Granular.

Supplement standard spec 204.3.2.2 with the following:

Backfill existing storm sewer or existing storm sewer structure locations shown for removal or abandonment outside the new traveled way with native backfill immediately after completing the sewer work. Backfill according to standard spec 209 within the traveled way.

All backfill, including native material, provided for removal or abandonment of existing storm sewer structures and pipes is considered incidental to the appropriate bid item.

SEF Rev. 14_1215

41. Removing Bulkhead, Item 204.9060.S.001.

A Description

This special provision describes removing Bulkhead as shown in the plans, and as hereinafter provided conforming to standard spec 204.

B (Vacant)

C Construction

Carefully remove the bulkhead without damaging the pipe. Replace portion of damaged pipe with similar size and material.

D Measurement

The department will measure Removing Bulkhead by each bulkhead removed in accordance with the contract, as acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.001	Removing Bulkhead	EACH

Payment is full compensation for furnishing all materials; removing bulkhead, replacing damaged pipe material including concrete collar around the pipe; and excavating and backfilling where necessary.

stp-204-025 (20150630)

42. Removing Draintile, Item 204.9090.S.001.

A Description

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

B (Vacant)

C Construction

Conform to standard spec 204.

D Measurement

The department will measure Removing Draintile by the linear feet, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9090.S.001	Removing Draintile	LF

stp-204-025 (20150630)

43. Removing 60-Inch Culvert Pipe, Item 204.9090.S.002.

A Description

This special provision describes removing a 60-Inch Culvert Pipe in accordance to the pertinent provisions of standard spec 204 and as hereinafter provided.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Removing 60-Inch Culvert Pipe in linear feet, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9090.S.002	Removing 60-Inch Culvert Pipe	LF

stp-204-025 (20150630)

44. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.

A Description

A.1 General

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

Republic Services Kestrel Hawk Landfill
1989 Oakes Rd.
Racine, WI 53406
(262) 884-7081

Advanced Disposal Emerald Park Landfill
W124 S10629 South 124th Street
Muskego, WI 53150
(414) 529-1360

Waste Management Pheasant Run Landfill
19414 60th St.
Bristol, WI 53104
(866) 909-4458

Perform this work according 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 Locations

The department completed testing for soil and groundwater contamination at locations within this project where excavation is required.

Testing indicated that petroleum-contaminated soil is present at the following location as shown on the plans:

1. Station 558+00 to 558+50, from 40 feet left of of reference line to project limits right, from 1 to 2 feet below grade. The estimated volume of contaminated soil to be excavated at this location is 117 CY (approximately 200 tons using a conversion factor of 1.7 tons per cubic yard).
2. Station 600+30 to 601+35, from 55 feet left of reference line to project limits right to project limits right, from 1 to 12+ feet below grade. The estimated volume of contaminated soil to be excavated at this location is 3,450 CY (approximately 5,850 tons using a conversion factor of 1.7 tons per cubic yard).

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.

Active groundwater monitoring wells were not observed within the construction limits. If active groundwater monitoring wells are encountered elsewhere during construction, notify the engineer and protect the wells to maintain their integrity. The environmental consultant will determine if monitoring wells need to be maintained. For monitoring wells that do need to be maintained, adjust the wells that do not conflict with structures or curb and gutter to be flush with the final grade. For wells that conflict with the previously mentioned items or if monitoring wells are not required to be maintained, they will be abandoned by others.

A.3 Excavation Management Plan

The excavation management plan for this project has been designed to minimize the offsite disposal 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 investigations, remediation activities and waste characterization within the project limits, 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:	Marita Stollenwerk
Phone:	(262) 901-2158 office,/ (262) 328-4528 cell
Fax:	(262) 879-1220
E-mail:	mstollenwerk@trcsolutions.com

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 disposal of contaminated soil from the bioremediation facility.

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 three calendar days prior to commencement of excavation activities in the contaminated area.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated area. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.

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

A.5 Health and Safety Requirements

Add the following to standard spec 107.1:

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

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

B (Vacant)

C Construction

Add the following to standard spec 205.3:

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

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

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

If dewatering is required in an area of known contamination, water generated from dewatering activities may contain contaminants and require testing, special handling, temporary storage, and disposal. Contaminated groundwater may be discharged to the sanitary sewer with prior approval from the City of Racine.

Contractor shall ensure continuous dewatering and excavation safety at all times. Provide, install, operate, maintain adequate pumping equipment, disassemble, and remove pumping equipment.

Costs associated with excavation and 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 the construction project.

Limit excavation in the location described in A.2 to minimize the handling of groundwater. Notify the engineer of any dewatering activities, and obtain any permits necessary to discharge or dispose of contaminated water. Provide copies of such Permit 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.

D Measurement

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

E Payment

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

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

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

45. Roadway Excavation

Replace standard spec 205.3.2(2) with the following:

Salvage topsoil, as specified in Article Topsoil Special, from excavation areas and the roadway foundation. Remove topsoil present below subgrade in cut sections and excess topsoil from embankment areas not required to cover side slopes as excavation common. Dispose of excess topsoil according to standard spec 205.3.12. Utilize Roadway Embankment to backfill areas of topsoil removal as directed by the engineer. The engineer may require EBS Backfill to fill shallow areas at cut-fill transitions to address stability issues related to the underlying soils.

Add the following to standard spec 205.5.2(1):

Provide the department with an earth flow diagram within 15 calendar days of receiving the contract Notice to Proceed.

Identify all excavation required for the project, all sources of roadway embankment fill including offsite material, shrinkage and swell factors, proposed stockpile material, structure excavation (if used in embankments), waste, and fills anticipated to be treated with a soil drying agent. Provide start and finish dates for each grading area within the division. These dates should correspond to the dates shown on the project schedule.

Provide earth flow diagram updates to the engineer for sequencing and source changes.

Add the following to standard spec 205.5.2(2):

The department will not pay EBS to remove frost from embankments or cut sections, unless directed by the engineer. It is the contractor's responsibility to stage construction so that exposed subgrades do not freeze or to provide adequate frost protection. Any work necessary to remove and replace frozen materials from newly constructed embankments or exposed cut sections is considered incidental to the excavation bid items.

46. QMP Subgrade.

A Description

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

Wisconn Valley Way

Braun Road

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

Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:

https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/default.aspx

B Materials

B.1 Quality Control Plan

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

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

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

B.2 Personnel

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

B.3 Laboratory

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

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

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

B.4 Equipment

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

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

http://www.atwoodsystems.com/.

Ensure that the gauge manufacturer or an approved calibration service calibrates the gauge within 12 months before using it on the project. Retain a copy of the calibration certificate with the gauge. Nuclear density gauge calibration verification is required daily when earthwork construction operations require testing under this special provision article. This calibration verification shall be performed using the departments "Validator" apparatus which is located at the 94 N-S construction field office. Establish a standard gauge reading for the "Validator" using the 10 test average method. The source emitter depth for calibration verification, in the direct transmission mode, will be determined by the engineer. This procedure will establish the "Validator" apparatus, as the contractor's project reference site.

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

B.5 Soil Source Study

Conduct and submit a soil source study before beginning of grading operations. Ensure that this study identifies each distinct soil type on the project within the top 15 feet of cut areas and all borrow material. Provide the in-bank natural moisture content for each soil. Develop moisture-density curves for each identified soil type by utilizing AASHTO T 99, with a minimum of 5 individual points, and a zero air voids

curve at a specific gravity of 2.65. If a different specific gravity is used perform a specific gravity test. Determine the maximum density and corresponding optimum moisture level for each soil type. Develop a site-specific family of Proctor curves for this contract from the completed soil source study and submit to the engineer for review and acceptance.

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

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

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

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

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

B.6 Quality Control Documentation

B.6.1 Control Charts

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

- Embankment portions of the project, except within 200 feet of bridge abutments.
- Embankment within 200 feet of bridge abutments.
- Subgrade cut portions of the project.
- Embankment in pipe culvert, sewer and waterline trenches.
- Structure and granular backfill placed at bridge abutments.
- Embankments of the project where embankments are 20 feet or higher regardless of location to be known as special compaction area.

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

Post control charts in an engineer-approved location and update daily. Ensure that the control charts include the project number, the test number, each test element, the applicable control limits, the contractor's individual test results, the running average of the last 4 data points, and the engineer's quality verification test data points. Use the control charts as part of a process control system for identifying potential problems and assignable causes. Format control charts according to the CMM.

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

B.6.2 Records

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

Provide copies of the field density and field moisture running average calculation sheets, records of procedure adjustments, and soil changes to the engineer and QV personnel daily.

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

B.7 Contractor Testing

B.7.1 General

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

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

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

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

B.7.2 Field Density and Field Moisture

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

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

B.7.3 Testing Frequency

B.7.3.1 Subgrade Embankment portions of the project, except within 200 Feet of bridge abutments

Perform the required tests at the following frequencies:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One per 2,000 cubic yards of fill per lift or one test per grading area per day whichever yields the most tests.

B.7.3.2 Subgrade Embankment Within 200 Feet of Bridge Abutments

Perform the required tests at the following frequencies:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One per 1,000 cubic yards of fill per lift or one test per grading area per day whichever yields the most tests.

B.7.3.3 Subgrade Cut

Perform the required tests at the following frequencies:

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

B.7.3.4 Subgrade Embankment in Pipe Removals, Pipe Culvert, Sewer and Waterline Trenches

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

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One test per 100 CY of backfill placed per lift or one test per day whichever yields the most tests.

B.7.3.5 Structure and Granular Backfill at Bridge Abutments

Perform the required tests at the following minimum frequencies:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One test per 2 feet of vertical backfill height per abutment.

B.7.3.6 Embankments of the project 20 feet or higher regardless of location to be known as special compaction area

Perform the required tests at the following minimum frequencies but exclude MSE wall backfill:

Test	Minimum Frequency
Field Density and Moisture (AASHTO T 310)	One per 2,000 cubic yards of fill per lift or one test per grading area per day whichever yields the most tests.

B.7.4 Control Limits

B.7.4.1 Field Density

B.7.4.1.1 General Conditions

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

B.7.4.1.2 Embankments of the project 20 feet or higher regardless of zone to be known as special compaction area excluding MSE wall backfill

The lower control limit for field density measurements in the special compaction area is a minimum of 98.0 percent of the maximum dry density as determined by AASHTO T 99 or T 272 for the 4-point running average and a minimum of 95.0 percent of the maximum dry density for any individual test.

B.7.4.2 Field Moisture Content

The upper control limit for the field moisture content for embankment material within 5 feet or less of finished subgrade is 105.0 percent of the optimum moisture as determined by AASHTO T 99 or T 272 for the 4-point running average.

The upper control limit for the field moisture content for embankment material greater than 5 feet below finished subgrade is 110.0 percent of the optimum moisture as determined by AASHTO T 99 or T 272 for the 4-point running average.

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

B.7.5 Corrective Action

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

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

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

B.8 Department Testing

B.8.1 General

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

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

B.8.2 Verification Testing

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

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

The department will perform verification testing as follows:

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

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

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

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

B.8.3 Independent Assurance Testing

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

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

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

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

B.9 Dispute Resolution

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

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

B.10 Acceptance

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

C (Vacant)

D (Vacant)

E Payment

Costs for all sampling, testing, and documentation required under this special provision are incidental to the work. If the contractor does not 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.

~~scf 207-005 (20171004)~~

47. Concrete Pavement Joint Layout, Item 415.5110.S.

A Description

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

B (Vacant)

C Construction

Plan and locate all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete to prevent uncontrolled cracking. Submit a joint layout design to the engineer at least 7 calendar days before paving each intersection. Do not lay out joints until the engineer has reviewed the joint layout design. Mark the location of all concrete joints in the field. Follow the plan details for joints in concrete making adjustments as required to fit field conditions.

D Measurement

The department will measure Concrete Pavement Joint Layout as a single lump sum unit for all joint layout designs and marking 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
415.5110.S	Concrete Pavement Joint Layout	LS

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

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

stp-415-020 (20170615)

48. Storm Sewer

Supplement standard spec 204.5.1 with the following:

QMP sampling, testing and documentation if applicable is incidental to removing storm sewer bid item and no separate payment will be made.

Supplement standard spec 608.2 with the following:

Two weeks prior to start of storm sewer construction, provide a shoring design and installation sequence for each location where shoring is to be used. Have a professional engineer, currently registered in the State of Wisconsin and knowledgeable of the specific site conditions and requirements, verify the adequacy of the design. Submit one electronic copy in portable document format of each shoring design, signed and sealed by the same professional engineer verifying the design, to the engineer for incorporation into the permanent project record.

Supplement standard spec 608.3.1 with the following:

(1) Incorporate excavated material in the work to the extent practicable. Use materials with suitable engineering properties for embankment.

(2) Dispose of surplus or unsuitable material as specified in standard spec 205.3.12.

Supplement standard spec 608.3.4 with the following:

Place rubber gasket joints over the spigot end or tongue of the entering pipe for all round storm sewer pipes horizontal and elliptical pipes with a rise less than or equal to 40-inches. Clean the gasket and the ends of the pipe from sand and gravel. If the gasket provided is neither factory lubricated nor self-lubricating, lubricate the outside of the gasket and the inside of the bell or groove of the last pipe with an engineer - approved vegetable lubricant immediately before making the joint. Place the spigot or tongue of the pipe being laid with the gasket in place into the bell or groove end of the previously laid pipe. Set pipe carefully to line and grade, and push or jack home. The engineer may order the use of ajack or “come-along” if deemed necessary to ensure that the joints are completely tight.

For horizontal elliptical pipe rise greater than 40-inches use mastic joint compound. Where factory lubricated rubber gasket joints are not available, clean the ends of the pipe from sand and gravel. Place

engineer-approved mastic joint sealer on both the spigot and bell ends of the pipe being laid. Apply additional mastic around each joint exterior and wrap each joint with Geotextile Fabric Type DF laid flat meeting requirements of standard spec 645. Wrap each joint so that the Geotextile Fabric overlaps each joint a distance of approximately ½ of the pipe diameter.

Replace standard spec 608.5(2) with the following:

Payment for the Storm Sewer Pipe bid items is full compensation for providing all materials, including all special Y's, mitered sections, elbows and connections required; for all submittals; for excavating and wasting excess material, except rock excavation; for providing rubber gaskets; Lubrication of rubber gaskets; mastic joint sealer; for supporting utilities in storm sewer trench; for shoring design, providing a signed and sealed copy of the design; for installation, monitoring, and removal of shoring; for forming foundation; for laying pipe; for sealing joints and making connections to new or existing features, bedding material; for backfilling and granular backfill material; for QMP sampling, testing and documentation; for cleaning out; and absent the pertinent contract bid items, for restoring the work site.

49. Catch Basins, Manholes, and Inlets.

Supplement standard spec 611.3.1 with the following:

Use a Grade "A" concrete for final adjustment of manhole cover. Provide a butyl rubber gasket or butyl rubber rope for joints of precast reinforced concrete manhole sections. Butyl Rubber gasket joint used for manholes conforms to 8.41.6 of the Standard Specification for Sewer and Water Construction in Wisconsin, latest Edition. Provide non-rocking covers for all drainage structures subject to traffic loading.

Submit shop drawings for all drainage structures. For structures where WisDOT standard detail drawings are not available, provide shop drawings prepared, verified and stamped by a professional engineer currently registered in the State of Wisconsin. Submit one electronic copy of shop drawings in portable document format for engineer's review two weeks before fabrication. Show clearly on shop drawings information for all pipe connections to the structure. The contractor is responsible for all errors of detailing and fabrication. The omission from the shop drawings of any pipe connection shall not relieve contractor of the responsibility of providing such materials, even though the shop drawings may have been reviewed and accepted by the engineer.

Supplement standard spec 611.3.2 with the following:

Conform to storm sewer concrete collar detail for storm sewer pipes to structure connections as shown on the plans.

Supplement standard spec 611.3.3 with the following:

Use monolithic concrete shimming as the plan shows for final adjustment of drainage structures located within the concrete pavement, concrete shoulders, concrete curb and gutter and concrete barrier wall.

Supplement standard spec 611.3.7 with the following:

Construct height adjustments of 4-inches or more with concrete grade rings. Never use grade rings less than 2-inches thick.

Replace standard spec 611.5.2 (1) with the following:

Payment for Catch Basins, Manholes, and Inlets bid items is full compensation for providing all submittals; materials, including all masonry, and concrete bricks, for Grade "A" concrete adjustments and monolithic concrete shimming; adjusting rings; conduit and sewer connections, steps, and other fittings; for providing and installing butyl rubber joints; for furnishing backfill, backfilling; all excavating, disposing of surplus material, and for cleaning out and restoring the work site; except that the department will pay for covers, including frames, grates and lids separately.

Cost of non-rocking covers for all drainage structures subject to traffic loading is incidental to new cover on proposed structure or reconstructing/adjusting manholes or inlets on existing structure.

50. Fence Safety, Item 616.0700.S.

A Description

This special provision describes providing plastic fence at locations the plans show.

B Materials

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

Furnish fence fabric meeting the following requirements.

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

C Construction

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

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

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
616.0700.S	Fence Safety	LF

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

stp-616-030 (20160607)

51. Pond Liner Clay, Item 640.1303.S.

A Description

This special provision describes providing low permeable clay in areas the plans show.

B Materials

For each source, before excavating and hauling the low permeable clay to the project, submit the results of the laboratory tests described in Table 1. The laboratory testing shall document that the clay from the source meets or exceeds the requirements.

The sample for the hydraulic conductivity test shall be remolded clay at a minimum dry density of 95% of the maximum dry density as determined by the Standard Proctor test AASHTO T-99 and at a moisture content required to achieve the required hydraulic conductivity, but with a minimum moisture content at or above the optimum moisture content as determined in the Standard Proctor test AASHTO T-99. Conduct

the laboratory source testing at the frequency listed in Table 1. Submit the test results to the engineer for review, two weeks before construction.

C Construction

C.1 Low Permeable Clay Placement

C.1.1 Subgrade

Compact the subgrade to a minimum density as defined in standard spec 207.3.6.2, Standard Compaction, or as otherwise specified in the contract requirements.

C.1.2 Erosion Protection

Do not place the low permeable clay until after all adjacent site grading has been completed and only after silt fence has been installed completely around the area of low permeable clay placement.

C.1.3 Low Permeable Clay Placement

After the fine grading is complete, place and compact low permeable clay in completed 6-inch lifts. Place each lift of low permeable clay in one continuous lift. See plans for low permeable clay construction limits. Measure the thickness of the low permeable clay the plans show perpendicular to the surface.

Notify the engineer at least three days before starting construction of low permeable clay.

Table 1

Reference	Number	Test Title	Requirements	Testing Frequency	
				Screening	QA/QC[12]
AASHTO[1]	T99-01	Moisture –Density Relationships of Soils Using a 2.5-kg (5.5 lb) Rammer a 305 mm (12-in.) Drop (Standard Proctor)	NA[11]	1/source	NA
AASHTO	T-88-00	Particle Size Analysis of Soils	P200[3] $\geq$ 50%	2/source	1/lift
AASHTO	T-89-02	Determining the Liquid Limit of Soils	LL[4] $\geq$ 22%	2/source	1/lift
AASHTO	T-90-00	Determining the Plastic Limit and Plasticity Index of Soils	PI[5] $\geq$ 12%	2/source	1/lift
AASHTO	T310-03	In-Place Density and Moisture Content of Soils and Soil-Aggregates by nuclear Methods (Shallow Depth)	DD[6] $\geq$ 95% of the MDD[7]	NA	100'x100' Grid/lift
ASTM[2]	D5084-03	Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter	K[8] $\leq 1 \times 10^{-7}$ cm/sec	1/source[9]	1/site[10]

Notes:

1. AASHTO = American Association of State Highway and Transportation Officials
2. ASTM = American Society of Testing and Materials
3. P200 = Percent by weight passing the #200 sieve (%)
4. LL = Liquid Limit (%)
5. PI = Plasticity Index (%)
6. DD = Dry Density (pcf)
7. MDD = Maximum Dry Density (pcf) as determined by the Standard Proctor Test
8. K = Hydraulic Conductivity (cm/sec)
9. The sample for the test shall be remolded at a minimum dry density of 95% of the maximum dry density as determined by the Standard Proctor test and at a moisture content required to achieve the required

hydraulic conductivity, but with a minimum moisture content at or above the optimum moisture content as determined in the Standard Proctor test.

10. An undisturbed sample from a thinned walled sampler (Shelby tube)
11. NA = Not applicable
12. QA/QC = Quality Assurance / Quality Control

Compact the low permeable clay to a minimum of 95% Standard Proctor AASHTO T-99 Maximum Dry Density with a footed compaction equipment having feet at least as long as the loose lift height. As needed, clay shall be disked or otherwise mechanically processed before compaction to break up clods and allow moisture content adjustment. Clod size shall be no greater than 4 inches. All compaction equipment utilized shall have a minimum static weight of 30,000 pounds.

Provide all equipment necessary to adjust low permeable clay to the proper moisture content for compaction.

Make sufficient number of passes of the compaction equipment over each lift of clay to ensure complete remolding of the clay.

Do not proceed with placement of additional lifts until all required low permeable clay testing and documentation has been completed for the previous lift.

During placement of the low permeable clay the minimum moisture content shall be as defined by the testing performed in the source evaluation and with the following limits:

- No drier than the optimum moisture content as determined by the Standard Proctor test.

If the in-place low permeable clay fails to meet the requirements of Table 1, then remove and replace or rework any portion of the low permeable clay not meeting the project requirements until project specifications are met. There shall be no compensation for removing, replacing and reworking low permeable clay not meeting the requirements in Table 1.

C.1.4 QA/QC Testing of the Low Permeable Clay

The department will perform the QA/QC testing at the frequency shown in Table 1. The department will record the thickness of low permeable clay on a 100 foot x 100 foot grid pattern.

Provide the following:

- Access for on-site testing, inspection, and documentation.
- Machinery required to grade/blade density test locations.
- Machinery required to collect undisturbed clay samples (i.e., with Shelby tubes).
- Replace and recompact clay material removed for testing purposes.

D Measurement

The department will measure Pond Liner Clay in volume by the cubic yards, 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
640.1303.S	Pond Liner Clay	CY

Payment is full compensation for dewatering areas of site where the low permeable clay is to be placed; for furnishing, placing and compacting the low permeable clay; and for performing all tests.

stp-640-016 (20130615)

52. Landscape Planting Surveillance and Care Cycles.

This item applies to the plantings required under the items Bioretention Type A Item SPV.0060.725; Bioretention Type B, Item SPV.0060.726. This item also applies to all Tree and Shrub Items in the contract.

If the care specialist fails to perform any of the required care cycles as specified in standard spec 632.3.19.1, the department will assess daily damages in the amount of $1000 to cover the cost of performing the work with other forces. The department will assess these damages for each day the

requirements of the care cycle remain incomplete, except when the engineer extends the required time period.

Supplement standard spec 632.3.18.1.1 (1) with the following:

A plant establishment period of 2 years applies to all trees and shrubs.

The plant establishment period for Bioretention items shall follow the completion of planting and will end at the contract completion.

Delete standard spec 632.3.18.1.3 One Growing Season Plant Establishment Period.

Replace standard spec 632.3.19.1 (2) with the following:

Proper care of plants consists of watering, weeding, cultivating, mowing perennials in early November, removing mowing debris, pruning, spraying, tightening braces and guys, retying wrapping, re-mulching, and other work necessary to keep plants and planting beds in a neat appearance. Between May 15 and October 15 care shall be provided until the contract is closed and accepted.

Perform planting surveillance care cycles once every two weeks for bioretention items. Perform planting surveillance care cycles once every month for the 2-year plant establishment period for the trees and shrubs.

53. Furnishing and Planting Plant Materials.

Add the following to standard spec 632.2.2.1 (1):

All plants shall be grown within the states of Wisconsin, Minnesota, Michigan, or parts of northern Illinois located within Zone 5 of the “Plant Hardiness Zone Map” produced by the United States Department of Agriculture, Miscellaneous Publication No. 1475, issued January 2012.

Supplement standard spec 632.2.2.8 (1) plant approval with the following:

The contractor shall furnish to Kristina Betzold, WDNR, (414) 507-4946, a written list of the sources from which the contractor proposes to obtain plant materials. Furnish this list to the Kristina Betzold within 15 days of the award of the contract. The list shall include the following species of trees:

Common name	**Scientific Name**
Grey dogwood	Cornus racemosa
Red-Osier dogwood	Cornus sericea
Eastern White Cedar	Thuja occidentalis
Quaking Aspen	Populus tremuloides
Swamp White Oak	Quercus bicolor
Red maple	Acer rubrum

54. Signs Type II.

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

Supplement standard spec 637.2.4 with the following:

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

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

Use beams a minimum of 6 feet in length or equal to the height of the sign to be supported, whichever is greater. Use U-bolts that are made of stainless steel, 1/2 inch diameter and of the proper size to fit the truss cords of each sign bridge. Install vertical sign support beams on each sign and use new U-bolts to attach each beam to the top and bottom cord of the sign bridge truss.

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

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

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

Supplement standard spec 637.3.3.3(3) with the following:

Furnish and install new aluminum vertical sign support beams on each sign and new U-bolts to attach each beam to the top and bottom cord of the sign bridge truss for Type II Signs.

Add the following to standard spec 641.2:

Submit shop drawings for sign bridges and overhead sign supports to SE Region Traffic Operations Engineer, Tom Heydel and Bureau of Structures Design.

~~SER-637.1 (20170405)~~

55. Field Facilities.

Replace standard spec 642 with the following:

The department has procured its own Field Facilities.

56. Covering Signs.

Replace standard spec 643.2.3.3(2) with the following:

(2) Ensure that covers are flat black, blank, and opaque.

Add the following to standard spec 643.3.4.1 as paragraph four:

(4) If multiple messages on a single sign are required to be covered, minimize the number of holes created by covering the sign with a single rectangular shaped covering. Multiple coverings on a single sign is only permissible where necessary to avoid covering necessary content or as directed by the engineer. Submit sign covering plans to the engineer for single signs requiring multiple coverings 3 days before performing work. Obtain engineer approval before covering signs. Remove sign coverings before placing fixed messages signs unless otherwise directed by the engineer.

sef-643-005 (20180104)

57. Traffic Control.

Supplement standard spec 643.3.1 with the following:

Provide the Racine County Sheriff's Department, the Wisconsin State Patrol, Village of Mount Police Department and the engineer a current telephone number with which the contractor or his representative can be contacted during non-working hours in the event a safety hazard develops.

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

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

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

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

Flagging operations shall follow standard spec 104.6.1(4) of the standard specs and chapter 6E of the WMUTCD.

Replace standard spec 643.3.1(7) with the following:

Provide equipment, forces, and materials to promptly restore any traffic control devices or pavement markings damaged or disturbed within 2 hours of being contacted.

SER-643.1 (20170808)

58. General Requirements for Electrical Work.

Replace standard spec 651.3.3(3) with the following:

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

59. Traffic Signals, General.

Work under this item shall consist of furnishing and installing materials and installing department provided materials for the traffic signal at Braun Road and Wisconn Valley Way.

Do not order any aboveground traffic signal equipment until you receive permission from the engineer that all aboveground equipment will be installed for the project.

60. Electrical Conduit.

Replace standard spec 652.5(2) with the following:

(2) Payment for Conduit Rigid Metallic, Conduit Rigid Nonmetallic, Conduit Reinforced Thermosetting Resin, and Conduit Special bid items is full compensation for providing the conduit, conduit bodies, and fittings; for providing all conduit hangers, clips, attachments, and fittings used to support conduit on structures; for pull wires or ropes; for expansion fittings and caps; for making necessary

connections into existing pull box, manhole, junction box or communication vault; for excavating, bedding, and backfilling, including any sand, concrete, or other required materials; for disposing of surplus materials; and for making inspections.

Replace standard spec 652.5(5) with the following:

(5) Payment for Conduit Loop Detector is full compensation for providing all materials, including conduit, compacted backfill, surface sealer if required, pull wire if required, condulets, conduit fittings, and for making necessary connections into existing pull box, manhole, junction box or communication vault.

61. Electrical Service Meter Breaker Pedestal Braun Road & Wisconn Valley Way, Item 656.0200.301.

Append standard spec 656.2.3 with the following:

(2) The department will be responsible for the electrical service installation request for any department maintained facility. Notify the maintaining authority if the signal is not state maintained that it is their responsibility to arrange for the electrical service installation.

(3) Electrical utility company service installation and energy cost will be billed to and paid for by the maintaining authority.

(4) Install the cabinet base and meter breaker pedestal first, so the electrical utility company can install the service lateral. Install a 3” conduit from the point of service from the utility to the meter breaker pedestal. Finish grade the service trench, replace topsoil that is lost or contaminated with other materials, fertilize, seed, and mulch all areas that are disturbed by the electrical utility company.

Append standard spec 656.5 with the following:

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

62. Traffic Signal Faces.

Append standard spec 658.3 with the following:

(5) 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.

63. Pedestrian Push Buttons.

Replace standard spec 658.2(5) with the following:

(1) Furnish freeze-proof ADA compliant pedestrian push buttons made by a department-approved manufacturer. 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.

64. Communication Systems.

Replace standard spec 678.2.1(1) with the following:

(1) The department will furnish fiber optic cable, splice enclosures, termination panels, Ethernet switches, wireless antennas, and cellular modems.

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 three working days prior to picking up the materials.

Replace standard spec 678.5(6) with the following:

(6) Payment for Install Ethernet Switches and Install Wireless Antennas is full compensation for transporting and installing the devices; for cables and connectors; and connecting the devices.

Replace standard spec 678.5(7) with the following:

(7) Payment for Install Cellular Modems is full compensation for transporting and installing the modem; for cables and connectors including rack mountable shelf; for connecting the devices; for programming and configuration; and for testing.

65. Intelligent Transportation Systems – General Requirements.

A Description

A.1 General

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

Unusual aspects of this project include:

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

A.2 Surge Protection

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

B Materials

B.1 General

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

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

B.2 Outdoor Equipment

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

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

B.3 Custom Equipment

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

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

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

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

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

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

B.4 Environmental Conditions

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

1. **Vibration and Shock:** Vehicle speed and classification sensors and any other equipment mounted atop poles or on structures shall not be impaired by the continuous vibration caused by winds (up to 90 mph with a 30 percent gust factor) and traffic.
2. **Duty Cycle:** Continuous
3. **Electromagnetic Radiation:** The equipment shall not be impaired by ambient electrical or magnetic fields, such as those caused by power lines, transformers, and motors. The equipment shall not radiate signals that adversely affect other equipment.
4. **Electrical Power:**
    a. **Operating power:** The equipment shall operate on 120-volts, 60-Hz, single-phase unless otherwise specified. It shall conform to its specified performance requirements when the input voltage varies from 89 to 135 volts and the frequency varies +3 Hz.
    b. **High frequency interference:** The equipment operation shall be unaffected by power supply voltage spikes of up to 150 volts in amplitude and 10 microseconds duration.
    c. **Line voltage transients:** The equipment operation shall be unaffected by voltage transients of plus or minus 20 percent of nominal line voltage for a maximum duration of 50 milliseconds. Equipment in the field shall meet the power service transient requirements of NEMA Standard TS-2 when connected to the surge protectors in the cabinets.
5. **Temperature and Humidity:**
    a. **Field equipment:** Equipment in the field shall meet the temperature and humidity requirements of NEMA Standard TS-2. Liquid crystal displays shall be undamaged by temperatures as high as 165 degrees F, and shall produce a usable display at temperatures up to 120 degrees F.
    b. **Equipment in Controlled Environments** shall operate normally at any combination of temperatures between 50 degrees F and 100 degrees F, and humidity's between 5 percent and 90 percent, non-condensing, and with a temperature gradient of 9 degrees F per hour.

B.5 Patch Cables and Wiring

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

B.6 Surge Protection

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

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

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

C Construction

C.1 Thread Protection

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

C.2 Cable Installation

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

C.3 Wiring

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

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

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

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

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

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

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

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

C.4 System Operations

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

C.5 Surge Protection

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

D Measurement

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

E Payment

No separate payment will be made for the work described in this article. All work described in this article shall be included under the ITS items in the contract.

stp-670-010 (20100709)

66. Field System Integrator FTMS, Item 670.0100.001.

A Description

This item includes the field system integration for the project, including ITS and Traffic Signals.

67. ITS Documentation FTMS , Item 670.0200.001.

A Description

This item includes the ITS Documentation for the project, including ITS and Traffic Signals.

68. Communication System Testing, Item 678.0500.

A Description

This item includes the Communication System Testing for the project, including ITS and Traffic Signals.

69. Optimized Aggregate Gradation Incentive, Item 715.0710.

Description

This special provision describes optional contractor optimized aggregate gradation, optional optimized mixture designs, and associated additional requirements for class 1 concrete used in concrete pavements. Conform to standard specification part 7 and as follows:

Optimized Aggregate Gradation

A Job Mix Formula (JMF) contains all of the following:

Proportions for each aggregate fraction conforming to table 1.

Individual gradations for each aggregate fraction.

Composite gradation of the combined aggregates including working ranges on each sieve according to table 2.

Submit the target JMF and aggregate production gradation test results to the engineer for review 10 business days before initial concrete placement.

TABLE 1 TARANTULA CURVE GRADATION BAND

SIEVE SIZES	PERCENT RETAINED
2 in.	0
1 1/2 in.	≤5
1 in.	≤16
3/4 in.	≤20
1/2 in.	4-20
3/8 in.	4-20
No. 4	4-20
No. 8[1]	≤12
No. 16[1]	≤12
No. 30[1] [2]	4-20
No. 50 [2]	4-20
No. 100 [2]	≤10
No. 200 [2]	≤2.3

[1] Minimum of 15% retained on the sum of the #8, #16, and #30 sieves.

[2] Conform to 24-34% retained of fine sand on the #30-200 sieves.

TABLE 2 JMF WORKING RANGE

SIEVE SIZES	WORKING RANGE[1] (PERCENT)
2 in.	+/- 5
1 1/2 in.	+/- 5
1 in.	+/- 5
3/4 in.	+/- 5
1/2 in.	+/- 5
3/8 in.	+/- 5
No. 4	+/- 5
No. 8	+/- 4
No. 16	+/- 4
No. 30	+/- 4
No. 50	+/- 3
No. 100	+/- 2
No. 200	≤ 2.3

[1] Working range limits of composite gradation based on moving average of 4 tests.

Test each component aggregate once per 1,500 cubic yards during concrete production. Take samples by one of the following sampling methods:

1. At the belt leading to the weigh hopper.
2. Working face of the stock piles at the concrete plant if approved by the engineer.

The department will take independent QV samples using the same sampling method the contractor uses for QC sampling. QV samples may be taken by the contractor's QC personnel if witnessed by the department's QV personnel. The department will split each QV sample and retain half for all dispute resolutions. 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.

If, during concrete production, the moving average of four for any sieve fall outside the allowable JMF working range do the following:

1. Notify the engineer of the test results within 1 business day from the time of sampling.
2. Make immediate adjustments to the JMF, within the limits specified in Table 3;
3. Review JMF adjustments with the engineer. Both the contractor and engineer will sign the adjusted JMF if the adjustments comply with Table 3.
4. If the moving average of four falls outside the adjusted allowable working range, stop production and provide a new mix design including JMF to the engineer.

TABLE 3 ALLOWABLE JMF ADJUSTMENTS

SIEVE SIZES	ALLOWABLE ADJUSTMENT (PERCENT)
>= No. 4	+/- 5
No. 8 – No. 30	+/- 4
No. 50	+/- 3
No. 100	+/- 2

Dispute Resolution

The department will resolve disputes as specified in standard spec 106.3.4.3.5 using QV split samples.

Sublot and Lot Size

A sublot consists of up to 1,500 cubic yards. A lot consists of two sublots.

Optimized Concrete Mixtures

The contractor may use a reduced cementitious content for concrete pavement placed if the contractor does the following:

1. Use an optimized aggregate gradation as defined in this special provision.
2. Conform to the additional testing requirements for flexural strength as specified in the contract special provisions.
3. Submit aggregate gradation result records no more than 2 years old when developing the mix design.
4. Determine the volume of voids in the optimized aggregates using ASTM C29.
5. Download and follow the instructions tab of the Optimized Gradation and Mix Design Spreadsheet located at:

   https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/qmp/default.aspx
6. Design an appropriate paste content based upon the Performance-based PCC Mix Design Guide located at:

   https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/qmp/default.aspx
7. Provide a minimum Vpaste/Vvoids of 1.25. (Paste/Void ratio equals the volume of paste divided by the volume of voids.).
8. Evaluate workability of trial batches by following section 6.8 of AASHTO Draft Performance Engineered Concrete Pavement Mixtures Specifications located at:

   https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/qmp/default.aspx
9. Submit trial batch workability results when submitting the mix design.
10. Submit the CP Tech center computer spreadsheet concrete mix design to the engineer for review at least 3 business days before producing concrete.
11. Provide a minimum cement content of 520 pounds per cubic yard, except if using type I, IL, or III cement in a mix where the geologic composition of the coarse aggregate is primarily igneous or metamorphic materials, provide a minimum cement content of 660 pounds per cubic yard.
12. The contractor may use class C fly ash or grade 100 or 120 slag as a partial replacement for cement. For binary mixes use up to 30% fly ash or slag. For ternary mixes use up to 30% fly ash plus slag in combination. Replacement values are in percent by weight of the total cementitious material in the mix.

13. See CMM 8-70.2.2.3 for additional guidance.

Measurement

The department will measure Optimized Aggregate Gradation Incentive by the dollar, for each combined averaged lot of QC test results meeting Table 1.

Payment

The department will pay incentive of 3 percent of the contract unit price for concrete pavement under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
715.0710	Optimized Aggregate Gradation Incentive	DOL

stp-715-005 (20180628)

70. Flexural Strength for Concrete Mix Design.

This special provision describes optional testing requirements for flexural strength during the mix design process. Conform to standard spec part 7 as modified in this special provision.

Add the following to standard spec table 701-2:

TEST	TEST STANDARD
Flexural Strength of Concrete	AASHTO T97

Replace standard spec 715.2.3.1(1) with the following:

(1) Provide both compressive and flexural strength information to demonstrate the strength of the proposed mix design. Use either laboratory strength data for new mixes or field strength data for established mixes as follows:

1. Use at least 5 pairs of cylinders for compressive strength. Demonstrate that the 28-day compressive strength will equal or exceed the 85 percent within limits criterion specified in standard spec 715.5.2.
2. Use at least 5 pairs of beams for flexural strength. Demonstrate that the 28-day flexural strength will equal or exceed 650 psi.

stp-715-010 (20170615)

71. Seed Bed Preparation, Item SPV.0005.001.

A Description

Prepare the seed bed for planting in the Wet Mesic Prairie and Mesic Prairie Planting Zones as shown on the plan and as hereinafter provided. Some seeding zones may contain areas that will not require seed bed preparation. Prior to Seed Bed Preparation, the engineer will identify these areas.

B (Vacant)

C Construction

Notify the engineer 5 working days' notice prior to any discing. The contractor shall work the upper 6 inches of topsoil at locations specified in the plan until the size of existing vegetation, stalks, leaves and other biomass does not exceed 6 inches in size, or as directed by the engineer. Discing shall be performed no more than 7 days prior to the time of seeding or as directed by the engineer. If planting does not occur within 7 days following discing, specified discing shall be repeated, to ensure a proper seeding surface. Once discing has been performed, driving over the disced area with equipment or vehicles prior to seeding activities shall be prohibited.

D Measurement

The department will measure Seed Bed Preparation by acre of seed bed preparation acceptably prepared.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0005.001	Seed Bed Preparation	ACRE

Payment is full compensation for discing the seed bed.

72. Seeding Special, Item SPV.0005.002.

A Description

This work shall consist of storing, mixing, sowing and raking the seed mix provided under Seed Mix, Special, in the Wet Mesic Prairie and Mesic Prairie Planting Zones shown on the plans or as directed by the engineer. All seeding shall be done in accordance to the requirements hereinafter provided.

B (Vacant)

C Construction

C.1 General

Seed shall be mixed at the project site by the contractor according to the seeding schedules specified under the item of Seed Mix Special, or as directed by the engineer. Sowing shall be accomplished after April 1st and prior to July 1st for a spring seeding or between October 15th and November 15th for a dormant fall seeding. Seeding shall not take place in flooded areas or when conditions are otherwise unsatisfactory for seeding. The contractor shall give the engineer 5 working days notice prior to any seeding activities.

Sowing

Seed shall be mixed and sown on the same day and seed shall be sown in a direction normal to the first pass. Any areas within the Wet Mesic Prairie and Mesic Prairie seeding zones that are not accessible with mechanical equipment shall be hand seeded and hand raked.

Wet Mesic Prairie Planting Zone

Seed shall be mixed with moist sand or sawdust on site prior to seeding. The contractor shall provide water on site to moisten the sand or sawdust. A ratio of one part moist sand or moist sawdust to one part native seed mix by volume shall be used. After seeding, the area shall be lightly raked to cover the seed with approximately 1/2-inch of soil.

Mesic Prairie Planting Zone

Seed shall be mixed with moist sand or sawdust on site prior to seeding. The contractor shall provide water on site to moisten the sand or sawdust. A ratio of one part moist sand or moist sawdust to one part native seed mix by volume shall be used. After seeding, the area shall be lightly raked to cover the seed with approximately 1/2-inch of soil.

D Measurement

The department will measure Seeding Special by the acre of seeding 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.0005.002	Seeding Special	ACRE

Payment is full compensation for handling, on-site storage of seed, weighing, mixing, sowing and raking; for supplying water, sand, and/or sawdust for mixing seed.

73. EBS Excavation, Item SPV.0035.001.

A Description

This special provision describes excavating and disposing of material taken below the subgrade of future pavement structures at locations determined by the engineer. The removal of excess topsoil will be paid under common excavation.

B Materials

Excavate all materials below subgrade not classified as rock, stone piles and stone fences, or marsh excavation. Perform work according to standard spec 205.2.2 and as hereinafter provided.

C Construction

Perform work according to the pertinent provisions of standard spec 205.3 and as hereinafter provided.

C.1 Yielding Subgrade

After rough grading on all or a portion of the subgrade in cut areas and in areas requiring 2 feet or less embankment is complete and the grade is ready for blue tops, point out areas of yielding subgrade to the engineer. The engineer will evaluate the subgrade to determine if EBS Excavation is required.

If the engineer requests, provide loaded trucks and run the subgrade as the engineer directs to confirm yielding areas. Perform EBS Excavation in yielding areas as directed by the engineer.

C.2 Excavation Below Subgrade

Excavate materials as directed by the engineer. Remove deposits of frost-heave material, unstable silty soils, wet and unstable soil, material salvaged from old road cores in marshes, topsoil containing considerable amounts of humus or vegetable matter, rocks, or other undesirable foundation material to the depth below finished grade as the engineer directs.

Compact, or prepare otherwise as required, the existing ground within the roadway foundation as necessary to support the roadway and attain the specified density.

Dispose of all excavated materials offsite at no expense to the department. Locate disposal sites outside the right-of-way and comply with all regulations relating to disposal of solid waste. Ensure that disposal sites are neatly constructed. In performing these operations, do not create a nuisance or cause pollution or siltation of natural watercourses, streams, lakes, wetlands, or reservoirs. Obtain written permits for disposal from the owner of the property where placing the material, unless disposing of the material at a licensed waste disposal operation. Furnish permits, or copies of permits, to the engineer before disposal. Do not deposit waste in wetlands.

C.3 Temporary Drainage

During construction, slope and drain the excavation bottoms to prevent water accumulation. If it is necessary in the prosecution of the work to interrupt existing surface drainage, sewers, or under drainage, provide temporary drainage until completing permanent drainage work.

D Measurement

The department will measure EBS Excavation by the cubic yard acceptably completed as computed using the method of average end areas, with no correction for curvature.

The department will not measure for payment materials excavated in forming benches or steps in preparing the foundation for embankments placed on slopes.

The department will not measure for payment materials excavated to remove frost from newly constructed embankments or cut subgrades unless directed by the engineer.

If undercutting designated slopes to provide for placing topsoil or salvaged topsoil, the undercut is incidental to the Topsoil Special bid item.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.001	EBS Excavation	CY

Payment for EBS Excavation is full compensation for performing excavation below subgrade after receiving engineer approval; for the satisfactory disposal of all resulting material offsite; for obtaining and furnishing copies of permits; for furnishing, placing, and removing all temporary drainage installations; and for providing loaded trucks and running them on the subgrade to confirm yielding areas.

The department will only pay for engineer-approved EBS Excavation to correct problems beyond the contractor's control. Work performed under standard spec 105.3 to correct unacceptable work is the contractor's responsibility.

ASP-5 will be applied to this item. The Fuel Usage Factor is 0.29.

74. EBS Backfill, Item SPV.0035.002.

A Description

This special provision describes backfilling EBS Excavation with breaker run. Areas of backfilling in locations of existing topsoil removal to be paid under Roadway Embankment.

B Materials

Furnish all materials according to standard spec 311.2 and as hereinafter provided.

C Construction

Place breaker run where EBS Excavation was performed or as the engineer directs. Compact breaker run using standard compaction conforming to standard spec 301.3.

D Measurement

The department will determine weight or volume, adjust for moisture, and convert between weight and volume as specified in standard spec 301.4.

The department will measure EBS Backfill by the cubic yard, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.002	EBS Backfill	CY

Payment for EBS Backfill is full compensation for providing and compacting breaker run in areas of EBS Excavation.

The department will only pay for EBS Backfill at engineer-approved EBS Excavation locations. Work performed under standard spec 105.3 to correct unacceptable work is the contractor's responsibility.

The department will not pay for EBS Backfill to replace materials excavated to remove frost from newly constructed embankments or cut subgrades.

75. Roadway Embankment, Item SPV.0035.003.

A Description

This special provision describes placing in embankments and in miscellaneous backfills, material obtained under the bid items in the roadway and drainage excavation or excavation for structure sections; or material obtained off site as specified under these special provisions.

B Materials

B.1 Embankment

Furnish roadway embankment conforming with standard spec 207.2 except as follows:

Supplement standard spec 207.2(1) with the following:

If the contractor utilizes offsite material to construct embankments, the material shall conform to standard spec 208 except as follows:

Delete standard spec 208.2.2(2).

C Construction

Construct roadway embankment according to standard spec 207.3 except as follows:

Supplement standard spec 207.3.6 with the following:

Prior to placing any material for a succeeding layer, ensure the previous layer does not have excessive rutting, displacement, or distortion under the compacting or hauling equipment. If rutting, displacement, or distortion is observed, the contractor shall inform the engineer how yielding material will be addressed prior to continuing roadway embankment construction.

If off site material is utilized, construction must conform to standard spec 208.3.

D Measurement

The department will measure Roadway Embankment without any correction for shrinkage or expansion factors by the cubic yard acceptably completed in its final location using the method of average end areas, except as follows:

a) The engineer and contractor mutually agree to an alternative volume calculation method.

b) If it is not possible to compute volumes of the various classes of roadway and drainage embankment by the method of average end areas due to erratic location of isolated deposits, the department may compute the volumes by three-dimensional measurements.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.003	Roadway Embankment	CY

Payment is full compensation for furnishing offsite and onsite sources, for forming, compacting, shaping, sloping, trimming, finishing, and maintaining the embankments. If offsite materials are utilized for roadway embankments, payment includes full compensation for all items listed in standard spec 208.5 (2), for obtaining all required permits, and all other incidental work required under this section.

ASP-5 will be applied to this item. The Fuel Usage Factor is 0.23.

76. Temporary Stone Ditch Checks, Item SPV.0060.002.

A Description

Furnish and install temporary stone ditch checks; clean and maintain ditch checks as shown on the plans or as directed by the engineer, and as hereinafter provided. This item also includes the removal and disposal of the ditch checks as directed by the engineer.

B Materials

Conform to standard specification 606.2.1 using the following gradation:

INCHES	VOLUME OCCUPIED BY STONES
>8	0%
4-6	50% - 90%
<2	5% or less

Material shall be visually inspected and approved by the engineer.

C Construction

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

Remove sediment from behind the stone ditch checks when it has accumulated to one half of the original height of the dam. Perform cleaning according to standard spec 628.

D Measurement

The department will measure Temporary Stone Ditch Checks by each item acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.002	Temporary Stone Ditch Checks	EACH

Payment is full compensation for furnishing, installing, maintaining, and cleaning; disposal of sediment; and for removing temporary ditch check.

Restoration of the area after ditch check removal shall be paid for with restoration items included in the contract.

(NER14-1104)

77. Sand Bags, Item SPV.0060.003.

A Description

This special provision describes the construction of dikes or barriers with sand filled bags as shown on the plans.

B Materials

Provide bags made of canvas, burlap, nylon or other approved material. Use bags that will contain a minimum of one half cubic foot of sand, be of one size and shape and be securely closed.

Use sand that conforms to standard spec 501.2.5.3 except that standard spec 501.2.5.3.4 shall be deleted. The maximum size of particle shall pass a No. 4 sieve.

C Construction

Remove and dispose of the sand bags and all surplus material upon completion of its use under this contract.

D Measurement

The department will measure Sand Bags as each individual sand bag, placed and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.003	Sand Bags	EACH

Payment is full compensation for furnishing and installing sand filled bags; for all excavation; for removal and disposal of the sand bags and all waste or surplus materials, including eroded materials and for shaping and restoring the area.

Any required topsoiling, fertilizing, seeding or mulching will be paid for under the applicable bid item.

SER-207.1 (20101021) EROC

78. Temporary Sediment Traps, Item SPV.0060.004.

A Description

Design, construct, and maintain temporary sediment traps used to intercept sediment-laden runoff and to retain the sediment.

B Materials

Materials shall be according to Wisconsin DNR Technical Standard 1063 (Sediment Trap).

C Construction

Design, construct, maintain and remove temporary sediment traps following the guidance in Wisconsin DNR Technical Standard 1063 (Sediment Trap) and according to the detail shown in the plans, and at the direction of the engineer. Locations as directed by the engineer. General locations requiring Temporary Sediment Traps are upstream of streams and wetlands which receive sediment laden runoff. Install prior to major grading operations. Do not remove until directed by the engineer.

D Measurement

The department will measure Temporary Sediment Traps as each individual sediment trap, installed according to the contract and acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.004	Temporary Sediment Traps	EACH

Payment is full compensation for design; furnishing and maintaining each basin; for removal of the basin; and for stabilization of disturbed area after removal.

79. Remove and Relocate Existing Apron Endwall 15-Inch, Item SPV.0060.005; Remove and Relocate Existing Apron Endwall 24-Inch, Item SPV.0060.006.

A Description

This special provision describes excavating and removing, existing reinforced concrete endwall; and transporting, storing, cleaning and reinstalling at new locations the plans show or the engineer directs.

B Materials

Use existing materials. Use new material conforming to 520.2.6 for joint connections.

C Construction

(1) Remove existing reinforced concrete apron endwalls from the existing location, clean, handle, store, transport to, and install at the new location without damaging the pipe or endwall. Replace any material damaged by the contractor.

(2) Construct apron endwalls at the new location as shown in the plans as specified in standard spec 520.3 and 608.3.

(3) Backfill the trench from which the endwalls were salvaged as specified in standard spec 203.3.5 up to the bottom of roadway subgrade.

D Measurement

The department will measure Remove and Relocate Existing Endwall (size) as each unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.005	Remove and Relocate Existing Apron Endwall 15-Inch	EACH
SPV.0060.006	Remove and Relocate Existing Apron Endwall 24-Inch	EACH

Payment is full compensation for salvaging, storing, hauling and placing of the endwall; excavation, including bed, any associated dewatering; for providing and placing granular backfill; for backfilling; for maintaining temporary drainage; and disposing of excess material.

80. Inlet Covers Beehive, Item SPV.0060.008.

A Description

The work under these items shall be according to the requirements of standard spec 611 and the details as shown on the plans.

B Materials

Conform to standard spec 611.

C Construction

Conform to standard spec 611.

D Measurement

The department will measure Inlet Cover (Types) by the unit in place, furnished, installed and acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.008	Inlet Covers Beehive	EACH

Payment is full compensation conforming to standard spec 611.5.

81. Manholes 9-Foot Item SPV.0060.011.

A Description

This work shall consist of design and construction of either a cast-in-place or precast storm sewer structure made of concrete with necessary reinforcement, metal frames, grates and lids, including required excavating and backfilling.

B Materials

Conform to standard spec 611.2.

C Construction

Conform to standard spec 611.3.

D Measurement

The department will measure Manholes (Size) by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.011	Manholes 9-Foot	EACH

Payment is full compensation for structure design; providing all materials, including all masonry, for Grade “A” concrete adjustments and monolithic concrete shimming; conduit and sewer connections, steps and other fittings; for furnishing all excavating and backfill; disposing of surplus material; and for cleaning out and restoring the work site. The department will pay for covers, including frames, grates, and lids separately.

The department will apply contract unit prices without adjustments to the quantities of manholes constructed to depths not greater than one foot above or below the elevations shown on the plans. Manholes that the engineer orders constructed to a depth greater than one foot above or below elevations shown on the plans will be specified for extra work and paid for according to standard spec 109.4.

82. Cover Plates Left In Place, Item SPV.0060.012.

A Description

Furnish and install a steel plate to cover and support construction, backfill material, and traffic loading at storm sewer structures as shown on the plans, according to the pertinent provisions of standard spec 611, and as hereinafter provided.

Cover plates left in place becomes the property of the department after final acceptance by the engineer.

B Materials

Provide a 0.75-inch minimum thickness steel plate that extends to the outside edge of the existing masonry walls. Backfill with base aggregate dense, 1 ¼".

Provide ¼-inch diameter steel bolts and epoxy to secure the cover plate to the top deck of the existing structure.

C Construction

Remove the existing grate, frame, and accompanying grade adjusting rings. Remove 2' minimum concrete block. Remove all loose debris and other accumulated material found on the structure deck which would otherwise interfere with cover plate installation. Drill a single 3/8-inch hole centered in each corner of the cover plate. Set the cover plate on the existing structure deck, ensuring the access hole is completely covered and that the cover plate extends to the edges of the existing masonry. Place cover plate over portion of storm sewer structure which is below the proposed flow line elevation. Do not extend covers above the proposed flow line to prevent flow bypass of the inlet. Embed and epoxy each ¼-inch steel bolts a minimum of 2-inches into the structure deck through each drilled hole. Backfill to the subgrade elevation any construction voids above the cover plate with base aggregate dense 1-1/4 inch.

Place cover plates as shown on the plans.

D Measurement

The department will measure Cover Plates Left In Place as each individual cover plate left in place, 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.0060.012	Cover Plates Left In Place	EACH

Payment is full compensation for furnishing and installing the cover plate and leaving cover plates in place; furnishing and installing drilled epoxy bars; base aggregate dense, 1-¼" backfill; removing inlet frame and lid; removing 2' minimum concrete block, and for excavation.

83. Connect Drain Tile, Item SPV.0060.013.

A Description

This special provision describes connecting existing drain tiles to proposed structures or proposed storm sewer pipes.

B (Vacant)

C Construction

Identify drain tile invert elevations through Drain Tile Exploration. Connect the exposed drain tile with the appropriate coupling, concrete collar or by means approved by the engineer to reestablish the connection. Use concrete masonry for concrete collar conforming to standard spec 520.2.4. Ensure that the connection does not negatively impact the current flow capacity of the drain tile.

D Measurement

The department will measure Connect Drail Tile as each new drain tile connection to a structure or pipe, acceptably completed. Measurement will include connections of new underdrain structures placed in previous stages of the project, in addition to pipe or structures constructed under previous projects.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.013	Connect Drain Tile	EACH

Payment is full compensation for performing all work; removing seals, end walls and concrete collars, providing all materials, couplings, concrete collars. Any additional pipe or materials required to connect the drain tile shall be considered incidental to this bid item. The new pipe that restores drainage will be paid separately under their respective bid items.

84. Pond I Outlet Storm Sewer Structure, Item SPV.0060.020; Pond J Outlet Storm Sewer Structure, ItemSPV.0060.021; Pond K Outlet Storm Sewer Structure, Item SPV.0060.022.

A Description

Furnish and install pond outlet Storm Sewer Structure according to the pertinent provisions of standard spec 611, as shown on the plans and as hereinafter provided. Furnish and install trash racks on the outlet Storm Sewer Structure. Furnish and install trash racks according to the pertinent provisions of standard spec 506 and 513, as shown on the plans and as hereinafter provided. Provide orifice holes and anti-seep collar as shown on the plan.

B Materials

Furnish manhole materials according to standard spec 611.

Furnish steel conforming to the requirements of standard spec 506.2.2.1. Furnish steel galvanized according to ASTM A123 and ASTM 1153 as applicable.

Trash racks shall be fabricated from structural steel shapes, flat bar and plates and shall be galvanized after fabrication. Shop drawings for the trash racks shall be submitted to the engineer for approval prior to fabricating the trash racks.

Furnish bolts, nuts and washers for the installation of the trash racks onto the Outlet Storm Sewer Structures. Bolts, nuts and washers according to standard spec 513.2.2.5.

C (Vacant)

D Measurement

The department will measure Pond Outlet (name) Storm Sewer Structure as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.020	Pond I Outlet Storm Sewer Structure	EACH
SPV.0060.021	Pond J Outlet Storm Sewer Structure	EACH
SPV.0060.022	Pond K Outlet Storm Sewer Structure	EACH

Payment is full compensation for providing and placing all materials, including all masonry, steel and pipe connections, and other fittings; furnishing and installing trash racks; for providing orifice holes and anti-seep collars; for furnishing all excavating, backfilling, disposing of surplus material, and for cleaning out and restoring the work site.

85. Slip-In Check Valve for 12-Inch Inside Diameter Pipe, Item SPV.0060.023; Slip-In Check Valve for 24-Inch Inside Diameter Pipe, Item SPV.0060.024; Slip-In Check Valve for 30-Inch Inside Diameter Pipe, Item SPV.0060.025; Slip-In Check Valve for 15-Inch Inside Diameter Pipe, Item SPV.0060.026.

A Description

The specification covers furnishing and installing Slip-In Check Valves (Check Valves) at locations as shown on the plans and according to manufacturer’s instructions.

B Materials

Contractor shall provide an in-line elastomeric type check valve with compression clamps and a slip-in cuff connection. Check Valve shall slip into downstream end of RCCP pond outlets and be attached with 316 stainless steel expansion clamps which shall expand outward to seal the valve against the RCCP pipe wall without use of a separate valve body or pipe.

Check Valve shall be one-piece pure gum rubber construction with reinforcement throughout the body, disc, and bill and resilient to freezing and UV exposure.

Check Valve shall open to allow passage of flow in one direction when line pressure exceeds the backpressure. When backpressure exceeds line pressure the bill and disc are forced closed preventing reverse flow. Valves shall be designed to crack open with less than 2-inch water depth above the valve invert and the following parameters:

The (size) Check Valve into structure at location as shown on the plan shall be designed to open with less than 2-inches of line pressure and rated for a maximum of 20 feet of backpressure. Check Valve shall have less than 0.2-feet of head loss for the 2-year design flow rate of 5 cubic feet per second.

Manufacturer shall have designed, fabricated and have at least three current installation of this style of check valves within a size range of 24” to 72” diameters within the United States. Manufacturer shall provide documentation, including project name, location, and references.

Manufacturer shall have conducted hydraulic testing to determine head loss, jet velocity and vertical opening height characteristics on a minimum of three sizes of valves. The testing must have been conducted for free discharge (pressurized and open channel flow discharging to atmosphere) and submerged conditions.

C Construction

Furnish and install Check Valve at the locations identified on the plans.

Check Valves will be placed Inside the diameter pipes. Due to small variations in RCCP fabrication depending on manufacturer, the contractor is responsible for providing the proper size Check Valve for the actual inside diameter of the RCCP being used. Check Valve shall be sized to fit such that the upstream and downstream sections of the valve shall be circumferentially in tight contact with the inside diameter of the outlet pipe. After installation, the Check Valve shall not protrude beyond the end of the outlet pipe.

Contractor to provide any clamps or hardware required for installation of Check Valve. Such items are considered incidental to this work.

The contractor will be responsible for installing the Check Valve as shown in the plans and details and per the manufacturer’s instructions. Contractor shall make manufacturer’s authorized representative available to assist during valve installation.

D Measurement

The department will measure Slip-In Check Valve (size) Inside Diameter Pipe by each individual unit installed in place, and the quantity measured for payment shall be the number of units each of the various locations completed and accepted according to the contract and plans. All clamps and hardware necessary for installing Check Valve are considered incidental to this work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.023	Slip–In Check Valve for 12-Inch Inside Diameter Pipe	EACH
SPV.0060.024	Slip–In Check Valve for 24-Inch Inside Diameter Pipe	EACH
SPV.0060.025	Slip-In Check Valve for 30-Inch Inside Diameter Pipe	EACH
SPV.0060.026	Slip-In Check Valve for 15-Inch Inside Diameter Pipe	EACH

Payment is full compensation for providing all labor, materials, incidentals, and hardware necessary for installing Slip-In Check Valve for (size) Inside Diameter Pipe.

86. Sign Support, Special Mounting, SPV.0060.050.

A Description

This special provision describes installing special sign supports per details in contract plans to top or side of concrete barrier wall or on bridge as applicable. Post material shall be according to specification standard spec 634. Mounting to be according to details in contract plans, “Sign Support, Special Mounting”

B Materials

Conform to standard spec 634.

C (Vacant)

D Measurement

The department will measure Sign Supports, Special Mounting for each individual special mounting acceptably installed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.050	Sign Support, Special Mounting	EACH

The payment is full compensation providing, hauling, and placing posts; and for providing all materials, including hardware and anchors.

87. Bioretention Type A Item SPV.0060.725; Bioretention Type B, Item SPV.0060.726.

A Description

This special provision describes constructing bioretention at locations as shown on the plans furnishing and planting perennial plants of the species, varieties and sizes specified, according to standard spec 632, and as hereinafter provided.

B Materials

B.1 Drainage Course (Gravel) Bioretention

Provide double washed gravel meeting the course aggregate #2 conforming to standard spec 501.2.5.

B.2 Sand for Bioretention Cell:

Provide the sand component consists of mostly SiO2, but sand consisting of dolomite or calcium carbonate may also be used. Manufactured sand or stone dust is not allowed. Wash and drain the sand to remove clay and silt particles prior to mixing and meet one of the following:

- USDA Course Sand (0.02 – 0.04-inches)
- ASTM C 33; fine aggregate.
- Standard spec 501.2.5.3.4 (Fine Aggregate Concrete Sand).

B.3 Compost for Bioretention Soil

Provide well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1- inch sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:

PART 1 – Organic Matter Content: 50 to 60 percent of dry weight

PART 2 – Conform compost to Wisconsin Department of Natural Resources Specifications S100 Compost.

B.4 Engineered Soil for Bioretention Cell

Provide planting mixture consisting of sand and compost in a ratio of 70% sand and 30% compost per the WDNR technical standard. Engineered soils to have adequate nutrient content to support plant growth, have a ph range of 5.5 to 6.5, be free of rocks, stumps, roots, brush, or other material over 1 inch in

diameter, and contain no other materials that may be harmful to plant growth or prove a hindrance to planting or maintenance.

B.5 Geotextile Filter Fabric for Bioretention

Provide nonwoven needle-punched geotextile, manufactured for subsurface drainage applications, made from polyolefins or polyesters; complying with the following:

Refer to current standard spec 645.2.2.4 for Geotextile, type DF (Drainage Filtration) Schedule B.

B.6 Bioretention Liner

Provide 45 mil EPDM unless otherwise specified.

B.7 Poly Edging Material

Furnish 5-inch to 5 ¼-inch tall medium density polyethylene edging with UV inhibitor, black in color, with pins/stakes as necessary to stabilize edging.

B.8 Plans

Provide plants of the specific species, variety, size, color and other characteristics as shown on the plans and Planting Data chart unless prior written approval of the engineer is provided in advance for any substitution.

B.8 PVC pipe and cleanout

Provide PVC pipe and cleanout as shown on the plan conforming to ASTM SDR 35.

C Construction

C.1 Excavation for Bioretention

Conform to construction methods as per Wisconsin Department of Natural Resources Conservation Practice Standard 1004 for “Bioretention For Infiltration,” except herein modified:

- In bioretention area, excavate as shown on plans and details for installation of underground piping system, gravel, geotextiles, and engineered soils. Dispose of excess material.
- Maintain supervision of excavations during working hours. Keep excavations covered or otherwise protected when unattended by contractor’s personnel. Do not over excavate.
- Minimize compaction of bioretention base and fill soil. If compaction has occurred, alleviate by using a chisel plow, ripper, or subsoiler to refracture the soil profile through the 12” compaction zone.

C.2 Bioretention Geotextile, Liner, Gravel and Soil Fill Installation

Do not mix or place gravels, soils and soils amendments in frozen, wet, or muddy conditions.

After compaction has been rectified or if no compaction has occurred, install gravels, perforated pipe, drain basins, overflow pipes, liner and geotextile filter fabric. Install engineered soil mix as specified on plans and details in 8”-12” lifts to meet final grades after natural settlement. Do not compact engineered soils during installation.

Install bioretention liner per manufacturers’ specifications. Protect underside from puncture by installing a geotextile fabric prior to bioretention liner installation. If installing stone or other material that may puncture the liner on top of liner, install a geotextile fabric on top of liner

Lightly watering lifts to promote natural settlement is permitted if the lift is allowed to dry before adding the next lift. Do not install if engineered soils or subgrade is frozen, muddy, or excessively wet.

C.3 Planting in Bioretention Cells

In planted areas of the Bioretention Cell located over the engineered soil area, no fertilizer is necessary. Mulch area prior to planting to minimize compaction during the installation process. Move mulch away at each individual plant location for installation and rake mulch back afterwards. Do not use pre-emergent or weed fabric in Bioretention Cell area.

In planted areas of the Bioretention Cell not located over the engineered soil area, such as side slopes and berm tops, loosen subgrade of planting areas to a minimum depth of 4 inches. Remove stones larger than 2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and dispose them properly. Spread planting soil to a depth of 4 inches but not more or less than required to meet finish grades after natural settlement and no fertilizer is necessary. Do not spread if planting soil or subgrade is

frozen, muddy, or excessively wet. Spread approximately one-half the thickness of planting soil over loosened subgrade. Mix thoroughly into top 4 inches of subgrade. Spread remainder of planting soil.

For shrub areas outside engineered soil area, add the following: 2” composted manure over entire planting area.

For perennial and groundcover areas outside engineered soil area, add the following: 2” composted manure over entire planting area, peat moss at 4 cubic foot bale per 100 square feet, Milorganite at 5 pounds per 1000 square feet, and Bonemeal at 5 pounds per 1000 square feet.

Grade planting areas and engineered soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll non-engineered soils only, rake, remove ridges, and fill depressions to meet finish grades after settling. Uniformly roll 2-inch thick shredded bark as shown on the plans.

C.4 Poly Edging Material

Install poly edging material where the plans show or where the engineer directs. Install poly edging material so top of edging is 1-inch above top of mulch height. Install poly edging material with pins/stakes as necessary to anchor and stabilize edging.

C.5 Planting in Bioretention Cells

Maintain Bioretention Cell plant material by watering through the first growing season and during dry periods there-after as necessary. Inspect, treat, or replace diseased plant material as necessary but no less than twice per year.

Inspect Bioretention Cell for weed germination twice per month during the Landscape Planting Surveillance and Care Cycles. Remove weed growth, preferably including roots.

Inspect for and repair soil erosion. Inspection and work associated with restoration of erosion are incidental to item Landscape Planting Surveillance and Care Cycles.

C.6 Planting Perennials

Plant perennials in prepared beds that are a minimum of 6” deep and backfilled with Planting Mixture (standard spec 632.2.3.4). Incorporate timed-release fertilizer thoroughly into the top 3" inches of planting soil at the manufacturers recommended rate. Use a fertilizer conforming to the following minimum requirements:

Nitrogen……14%

Phosphoric Acid……14%

Potash……14%

Thoroughly water-in plants to eliminate all air pockets in the planting pit.

Plant all perennials between May 1 and September 1 unless directed otherwise by the engineer.

Contractor shall remove and dispose of all excess material from site.

D Measurement

The department will measure Bioretention (type) as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.725	Bioretention Type A	EACH
SPV.0060.726	Bioretention Type B	EACH

Payment is full compensation for all furnishing, excavation, drainage course gravel, sand, geotextile fabric, bioretention liner, installation, poly edging material, all plants and plantings, planting soil, PVC 6-inch SDR 35 pipe and cleanout, shredded bark mulch, complete installation, and for removing and disposing of excess material.

88. Pavement Cleanup Project 2704-00-76, Item SPV.0075.001

A Description

This special provision describes cleanup of dust and debris from pavements as the engineer directs.

B Materials

B.1 Pavement Cleanup

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

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

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

C Construction

C.1 Surveillance

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

C.2 Pavement Cleanup

Keep all pavements, sidewalks, driveways, curb lanes and gutters within the project boundaries, free of dust and debris generated from all activity under the contract.

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

Skid steers with mechanical power brooms may only be used on sidewalks and driveways whose pavements will not support the weight of a street sweeper, unless otherwise approved by the engineer. Do not dry sweep. Ensure all broomed equipment used for sweeping has a functioning water bar.

D Measurement

The department will measure Pavement Cleanup (Project) by the hour, acceptably completed and only with prior approval by the engineer.

Tickets shall include:

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

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0075.001	Pavement Cleanup Project 2704-00-76	HR

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

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89. Seed Mix Special, Item SPV.0085.001.

A Description

Supply native seed for planting in the following zones as indicated in the plans:

- Wet Mesic Prairie Planting Zone
- Mesic Prairie Planting Zone

Supply seed samples, germination test data, provide storage and deliver seed, all in accordance to the Special Provisions provided herein.

Seed Sources

Supply seed from Wisconsin nurseries specializing in growing native species from Wisconsin genotypes.

B Material

Seed Specifications

Supply native seed and cover crop. Transport the seed from the vendor to the construction site. Notify the seed vendor and the engineer a minimum of ten working days in advance of the required pick-up date and/or delivery to the construction site. The following native seed specifications will be used in the acquisition of the seed.

(a) Native seed shall be true to species, packed separately, and labeled as follows:
Botanical and common name
Quantity (in ounces)
Date and location picked (1/4, 1/4 section, township, range and county)
Name of company supervising the picking

(b) Seed shall be free of non-seed debris and of noxious weeds including reed canary grass, purple loosestrife, box elder, buckthorn, phragmites (giant reed grass) and Canada thistle.
(c) Seed shall be of local ecotype and origin shall be no further than 150 linear miles from the project location.
(d) Seed shall be picked at the appropriate time for ripeness and shall be viable. A random sample of each species will be tested and certified for germination prior to delivery to the contractor. Provide written documentation of germination tests to the engineer before seeding can begin. Provide seed with a minimum germination rate of 80 percent to be accepted. If the seed does not meet the minimum required 80 percent germination rate, supply additional seed at the cost of the seed supplier/contractor to meet the total viable seed quantity.
(e) Deliver a representative sample of each species to the engineer for inspection and identification prior to the acceptance of the seed. Deliver all seed samples before seeding can begin.
(f) Cover crop in the planting zones will be perennial ryegrass (*Lolium perenne*) for spring plantings and winter wheat (*Triticum aestivum*) for dormant fall plantings.

Seed

The following seeding schedule shall be used in each of the designated zones. Prior to seeding, the engineer must approve substitutions or changes to the seeding schedule. Seeding rates and species mixes shall be as follows, or as directed by the engineer: All common and scientific species names are referenced from National List of Plant Species that Occur in Wetlands: Wisconsin (U.S. Fish and Wildlife Service May 1988). All seed quantities provided assume a minimum 80% germination rate.

(a) **Zone 1: Wet Mesic Prairie Planting Zone** (XX acres). The seed mix for the Wet Mesic Prairie Planting Zone will be composed of Species in the Wet Mesic Prairie mix including grasses, sedges and rushes, and forbs, in addition to cover crop

Sedges and Rushes: Seed at rates and composition listed. Provide a minimum of 4 species. Required species must be included at percentage composition listed. Additional species may be substituted, meeting requirements in special provisions as longs as total percentage composition for sedge group is met (7.07% of total).

Grasses: Seed at rates and composition listed. A minimum of 6 species. Required species must be included at percentage composition listed. Additional species may be substituted, meeting requirements in special provisions as longs as total percentage composition for grass group is met (39.83% of total).

Forbs: Seed at rates and composition listed. A minimum of 12 species. Required species must be included at percentage composition listed. Additional species may be substituted, meeting requirements in special provisions as longs as total percentage composition for forb group is met (11.34% of total).

(b) **Zone 2: Mesic Prairie Planting Zone** Seed Mix (XX) acres. The seed mix for the Mesic Prairie Planting Zone will be comprised of Species in the Wet Mesic Prairie mix including grasses and forbs, in addition to cover crop

Grasses: Seed at rates and composition listed. A minimum of 6 species. Required species must be included at percentage composition listed. Additional species may be substituted, meeting requirements in special provisions as longs as total percentage composition for grass group is met (39.83% of total).

Forbs: Seed at rates and composition listed. A minimum of 12 species. Required species must be included at percentage composition listed. Additional species may be substituted, meeting requirements in special provisions as longs as total percentage composition for grass group is met (14.89% of total).

Sowing shall be accomplished after April 1st and prior to July 1st for a spring seeding or between October 15th and November 15th for a dormant fall seeding. Cover crop in the planting zones will be perennial ryegrass (Lolium perenne) for spring plantings and winter wheat (Triticum aestivum) for dormant fall plantings, at rates indicated.

Seeding for Wet Mesic Prairie

Common Name	Scientific Name	% of Mix	Seeds/Ft	Rate/Acre[1]
Grasses				
Common Name	Scientific Name	% of Mix	Seeds/Ft	Rate/Acre
Big Bluestem*	*Andropogon gerardii*	6.90%	3.7	1.00 PLS Lbs
Indiangrass*	*Sorghastrum nutans*	6.76%	2.2	1.00 PLS Lbs
Little Bluestem*	*Schizachyrium scoparium*	6.07%	6.5	1.00 PLS Lbs
Switchgrass*	*Panicum virgatum*	5.34%	3.9	0.85 PLS Lbs
Prairie Dropseed*	*Sporobolus heterolepis*	5.17%	2.7	0.85 PLS Lbs
Porcupine Grass*	*Hesperostipa spartea*	3.45%	3.9	0.65 PLS Lbs
Fringed Brome	*Bromus ciliatus*	3.45%	5.5	0.65 PLS Lbs
Prairie Cord Grass	*Spartina pectinata*	1.38%	1.2	0.25 PLS Lbs
Fowl Bluegrass	*Poa palustris*	1.03%	9.6	0.20 PLS Lbs
Blue Joint Grass	*Calamagrostis canadensis*	0.28%	4.1	0.04 PLS Lbs
Total Grasses[3]:		**39.83%**		
Sedges/Rushes				
Broad-leaved Woolly Sedge*	*Carex pellita*	1.34%	0.5	0.25 PLS Lbs
Tussock Sedge	*Carex stricta*	1.14%	0.4	0.22 PLS Lbs
Brown Fox Sedge*	*Carex vulpinoidea*	1.69%	3.7	0.30 PLS Lbs
Green Bulrush*	*Scirpus atrovirens*	1.69%	16.9	0.30 PLS Lbs
Woolgrass	*Scirpus cyperinus*	1.21%	18.7	0.20 PLS Lbs
Total Sedges/Rushes[3]:		**7.07%**		
Forbs				
Rosinweed	*Silphium integrifolium*	0.21%	0.1	0.03 PLS Lbs
Swamp Milkweed*	*Asclepias incarnata*	1.05%	0.1	0.18 PLS Lbs
Swamp Aster*	*Aster puniceus*	0.55%	2.4	0.08 PLS Lbs
Sky Blue Aster	*Aster azureus*	0.34%	1.2	0.05 PLS Lbs
Prairie Dock	*Silphium terebinthinaceum*	0.45%	1.0	0.10 PLS Lbs
Joe Pye Weed*	*Eupatorium maculatum*	0.98%	1.4	0.14 PLS Lbs
Tall Boneset*	*Eupatorium altissimum*	1.21%	1.8	0.20 PLS Lbs
Sneezeweed	*Helenium autumnale*	0.84%	2.4	0.05 PLS Lbs
Cream Wild Indigo*	*Baptisia leucophaea*	0.84%	0.3	0.10 PLS Lbs
Prairie Blazingstar	*Liatris pycnostachya*	0.64%	0.1	0.02 PLS Lbs
Lead Plant*	*Amorpha canescens*	0.57%	1.8	0.10 PLS Lbs
Monkey Flower	*Mimulus ringens*	0.07%	8.4	0.01 PLS Lbs
Stiff Goldenrod*	*Solidago rigida*	1.05%	6.5	0.20 PLS Lbs
Grass-leaved Goldenrod*	*Solidago graminifolia*	0.64%	2.6	0.12 PLS Lbs
Blue Vervain*	*Verbena hastata*	1.03%	5.1	0.15 PLS Lbs
Wild Bergamot	*Monarda fistulosa*	0.21%	0.3	0.03 PLS Lbs
Compass Plant	*Silphium laciniatum*	0.14%	5.9	0.02 PLS Lbs
Gray Headed Coneflower*	*Ratibida pinnata*	0.52%	1.0	0.25 PLS Lbs
Total Forbs[3]:		**11.34%**		
Cover Crop[2]				
Perennial Ryegrass*	*Lolium perenne*	41.76%	44.5	100.0 PLS Lbs
Winter Wheat*	*Triticum aestivum*	41.76%	44.5	100.0 PLS Lbs

*Required species

Seeding for Mesic Prairie

Common Name	Scientific Name	% of Mix	Seeds/Ft	Rate/Acre[1]
Grasses				
Common Name	Scientific Name	% of Mix	Seeds/Ft	Rate/Acre
Big Bluestem*	*Andropogon gerardii*	6.90%	3.7	1.00 PLS Lbs
Indiangrass*	*Sorghastrum nutans*	6.76%	2.2	1.00 PLS Lbs
Little Bluestem*	*Schizachyrium scoparium*	6.07%	6.5	1.00 PLS Lbs
Switchgrass*	*Panicum virgatum*	5.34%	3.9	0.85 PLS Lbs
Prairie Dropseed*	*Sporobolus heterolepis*	5.17%	2.7	0.85 PLS Lbs
Porcupine Grass*	*Hesperostipa spartea*	3.45%	3.9	0.65 PLS Lbs
Fringed Brome	*Bromus ciliatus*	3.45%	5.5	0.65 PLS Lbs
Prairie Cord Grass	*Spartina pectinata*	1.38%	1.2	0.25 PLS Lbs
Fowl Bluegrass	*Poa palustris*	1.03%	9.6	0.20 PLS Lbs
Blue Joint Grass	*Calamagrostis canadensis*	0.28%	4.1	0.04 PLS Lbs
Total Grasses[3]:		**39.83%**		
Forbs				
Butterfly Milkweed*	*Asclepias tuberosa*	1.21%	0.5	0.24 PLS Lbs
Common Milkweed*	*Asclepias syriaca*	1.05%	0.1	0.20 PLS Lbs
Smooth Blue Aster	*Aster laevis*	0.55%	2.4	0.15 PLS Lbs
Sky Blue Aster*	Aster azureus	1.34%	1.2	0.35 PLS Lbs
Prairie Dock	*Silphium terebinthinaceum*	0.45%	1.0	0.50 PLS Lbs
Black Eyed Susan*	*Rudbeckia hirta*	1.98%	10.5	1.30 PLS Lbs
Tall Boneset*	*Eupatorium altissimum*	1.21%	1.8	0.13 PLS Lbs
Sneezeweed*	*Helenium autumnale*	0.84%	2.4	0.15 PLS Lbs
Cream Wild Indigo*	Baptisia leucophaea	0.84%	0.3	0.10 PLS Lbs
Prairie Blazingstar	*Liatris pycnostachya*	0.64%	0.1	0.02 PLS Lbs
Lead Plant*	*Amorpha canescens*	0.57%	1.8	0.10 PLS Lbs
Monkey Flower	*Mimulus ringens*	0.07%	8.4	0.01 PLS Lbs
Stiff goldenrod*	*Solidago rigida*	1.05%	6.5	0.18 PLS Lbs
Grass-leaved Goldenrod	*Solidago graminifolia*	0.64%	2.6	0.02 PLS Lbs
Blue Vervain*	*Verbena hastata*	1.03%	5.1	0.15 PLS Lbs
Wild Bergamot	*Monarda fistulosa*	1.21%	1.5	0.06 PLS Lbs
Compass Plant	*Silphium laciniatum*	0.14%	5.9	0.02 PLS Lbs
Gray Headed Coneflower*	*Ratibida pinnata*	0.52%	1.0	0.25 PLS Lbs
Total Forbs[3]:		**14.89%**		
Cover Crop[2]				
Perennial Ryegrass*	*Lolium perenne*	45.30%	44.5	100.0 PLS Lbs
Winter Wheat*	*Triticum aestivum*	45.30%	44.5	100.0 PLS Lbs

*Required species

1: PLS Lbs = Pounds of Pure Live Seed per acre, PLS = Purity % X Germination %

2: Seed planted after April 1st and prior to July 1st should use Perennial Ryegrass as a cover crop. Seed planted after October 15th and before November 15th should use Winter Wheat as a cover crop.

3: Required species must be included at percentage composition listed. Additional species may be substituted, meeting requirements in special provisions as longs as total percentage composition for each plant group (grasses, sedges/rushes, forbs) is met.

C (Vacant)

D Measurement

The department will measure Seed Mix Special by the pound meeting the required 80 percent germination rate and acceptably completed.

The equivalent pounds, based on the following formula for each species will be used to measure native seed not meeting the required 80 percent germination rate:
Equivalent pounds = (number of actual pounds of native seed supplied) X (actual percent germination rate/80).

The department will measure quantities based on net weights of seed shipments, or on quantities weighed on department-approved scales the contractor furnishes.

The department will make deductions for all quantities wasted or not actually incorporated in the work according to the contract.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0085.001.	Seed Mix Special	LB

Payment is full compensation for supply and delivery of native seed and cover crop to the project site; providing seed samples and germination data.

90. Heavy Duty Silt Fence, Item SPV.0090.001.

A Description

This special provision describes the delivery, installation, maintenance, and removal of Heavy Duty Silt Fence. Install fence as directed by the engineer. Do not remove fence until directed by the engineer.

B Materials

Provide Heavy Duty Silt Fence consisting of a composite of woven wire fence fabric, posts, geotextile, fasteners, and to be assembled by the contractor. Woven wire fence fabric shall be a standard field fence type a minimum of 4 feet high, a maximum mesh spacing of 6-inches and minimum 14-$^1/_2$ gauge wire.

Provide “studded tee” or “U” type metal posts with a minimum length of 7 feet –6 inches and a minimum weight of 1.3 lb/ft.

Provide geotextile fabric meeting the following requirements

Property	Unit	Test Method	Minimum Average Roll Value
Grab Tensile Strength	LB.	ASTM D4632	380
Grab Tensile Elongation	%	ASTM D4632	50
Puncture Strength	LB.	ASTM D4833	240
Trapezoid Tear Strength	LB.	ASTM D4533	145
Apparent Opening Size	U.S. Standard Sieve	ASTM D4751	170 (0.09 mm)
Permittivity	sec^{-1}	ASTM D4491	0.7
Water Flow Rate	$Gal/min/ft^2$	ASTM D4491	50

UV Resistance after 500 hours	% strength retained	ASTM D4355	70

Furnish a manufacturer's Certified Report of Test or Analysis that the geotextile fabric delivered for use in the work meets the above requirements to the engineer at least 15 days prior to use in the work. Provide geotextile fabric bearing markings to clearly identify it with the applicable test report furnished to the engineer.

Supply material in 15'9" wide rolls and cut in half.

C Construction

Install the Heavy Duty Silt Fence as directed by the engineer and shown on the attached detail drawing. Space ties and anchors to adequately support system. Include or add acceptable guy lines, where required, for additional support.

Maintenance work, when required, will be specified on erosion control orders. Maintenance includes replacement of failed 12GA wire ties; re-anchoring of metal posts (standing lying sections back-up); entrenchment of the bottom fabric; and guy line repairs, if required. Geotextile fabric and woven wire fence fabric replacement not required for maintenance.

D Measurement

The department will measure Heavy Duty Silt Fence by the linear foot acceptably completed. The department will measure along the base of the fence, center-to-center of end post, for each section of fence.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.001	Heavy Duty Silt Fence	LF

Payment is full compensation for all furnishing, assembling, erecting, maintaining, and removal of the silt fence; and for anchoring the silt fence.

91. Pipe Underdrain 6-Inch Special, Item SPV.0090.002.

A Description

This special provision describes providing necessary subsurface drainage by constructing trenches, placing the required geotextile fabric, installing the designated pipes or drainage devices, connecting the wrapped underdrain to receiving structures, providing cored connection holes, back-plastering and or mortaring connections to storm sewer structures (both on the external and internal sides of the receiving structure), providing and installing PVC or HDPE fittings, and caps or plugs ,for excavating, plowing, backfilling the trenches with the specified backfill material according to standard spec 310, 612 and 645, salvaging; disposing of surplus material; and restoring the work site as shown on the plans and details, and as hereinafter provided.

B Materials

B.1 Base Aggregate

Use only base aggregate open graded conforming to standard spec 310.2.

B.2 Geotextile Fabric

Utilize geotextile fabric consisting of Type DF Schedule A and conforming to standard spec 645.2.4. Completely wrap the installation trench with geotextile fabric.

C (Vacant)

D Measurement

The department will measure Pipe Underdrain 6-Inch Special by the linear foot, acceptably completed. The department will measure along the centerline of the pipe, center to center of junctions and fittings.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.002	Pipe Underdrain 6-inch Special	LF

Payment is full compensation for providing, handling, and placing all materials, including pipe, base aggregate open graded, geotextile fabric Type DF Schedule A, providing cored connections, making all necessary connections to the receiving structures, performing back-plastering and or mortaring of wrapped underdrain connections to storm sewer structures, providing and installing all fittings, and caps or plugs; for furnishing all excavating, plowing, and re-compacting, salvaging; disposing of surplus material; and restoring the work site.

92. Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 53x83-Inch, Item SPV.0090.003.

A Description

Furnish and install culvert pipe reinforced concrete.

B Materials

Conform to materials as per standard spec 522.2.

Provide culvert pipe reinforced concrete (Class) (size) conforming to Concrete D-Load Pipe ASTM C 507 specifications.

Provide culvert pipe reinforced concrete pipe (Class) (size) conforming to Concrete D-Load Pipe ASTM C 507 specifications. The design strength of the pipe shall be the D-load to produce the 0.01-inch crack carrying HL 93 truck load and maximum fill height over the pipe as shown on the plan.

The culvert pipe reinforced concrete pipe (class) (size) design shall be responsibility of the contractor and shall be designed by a professional engineer, registered in the State of Wisconsin, with knowledge of the specific site conditions and requirements. Submit one copy of the culvert pipe design, signed and sealed, to the engineer for incorporation into the permanent project record.

C Construction

Construct according to the plans and standard spec 522.3.

D Measurement

The department will measure Culvert Pipe Reinforced Concrete (Class) (Size) bid item(s) by the linear foot, acceptably completed. The measured quantity equals the number of linear feet of pipe measured along the centerline of the pipe.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.003	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 53x83-Inch	LF

Payment will conform to standard spec 522.5 and submitting one copy of culvert pipe design, signed and sealed by a professional engineer registered in the State of Wisconsin.

93. Marking Line Contrast Epoxy 4-inch, Item SPV 0090.004.

A Description

This special provision describes applying contrast epoxy marking conforming to standard spec 646, as the plans show, and as follows.

B Materials

Furnish epoxy pavement marking materials conforming of standard spec 646.2.

C Construction

Apply two 1 ½-inch wide black epoxy lines with a 4-inch separation between the two black lines for the first pass, followed by a 4-inch wide white epoxy line second pass, for a total width of 7 inches. Apply epoxy pavement marking conforming to standard spec 646.3.

D Measurement

The department will measure Marking Line Contrast Epoxy 4-Inch Special by the linear foot, acceptably completed, measured once as the length of the centerline of the completed installation.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.004	Marking Line Contrast Epoxy 4-Inch	LF

Payment is full compensation for providing replacement marking.

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94. Marking Line Contrast Epoxy 8-inch, Item SPV 0090.005.

A Description

This special provision describes applying contrast epoxy marking conforming to standard spec 646, as the plans show, and as follows.

B Materials

Furnish epoxy pavement marking materials conforming of standard spec 646.2.

C Construction

Apply two 1 ½-inch wide black epoxy lines with a 8-inch separation between the two black lines for the first pass, followed by an 8-inch wide white epoxy line second pass, for a total width of 7 inches. Apply epoxy pavement marking conforming to standard spec 646.3.

D Measurement

The department will measure Marking Line Contrast Epoxy 8-Inch Special by the linear foot, acceptably completed, measured once as the length of the centerline of the completed installation.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.005	Marking Line Contrast Epoxy 8-Inch	LF

Payment is full compensation for providing replacement marking.

SER-646-002 (2010131) 2-13-18

95. Concrete Curb and Gutter 6-Inch Sloped 48-Inch Type A, Item SPV.0090.006.

A Description

Perform this work in accordance to the pertinent requirements of section 601 of the standard specifications and conform to the construction detail shown in the plans.

B Materials

Use materials as described in the construction detail shown in the plans and as described in standard spec 601.2.

C Construction

Perform work in accordance to standard spec 601.3.

D Measurement

The department will measure Concrete Curb and Gutter 6-Inch Sloped 48-Inch Type A by the linear foot, acceptably completed, measured along the flow line of the gutter.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.006	Concrete Curb and Gutter 6-Inch Sloped 48-Inch Type A	LF

Payment is full compensation for preparing the foundation; all special construction required at driveway entrances or curb ramps; for providing all materials, including concrete, and expansion joints; for placing, finishing, protecting, and curing concrete.

96. Surveillance and Care for Seeding Special, Item SPV.0105.001.

A Description

This special provision describes the monitoring and care requirements for the Seeding Special areas.

B (Vacant)

C Construction

C.1 Mowing

During the growing season after planting Seeding Special seed mixture, mow all seeded areas twice as the engineer directs. Mow vegetation back to 6 inches when it has reached a height of at least 12 inches. Mow twice per year (spring and fall) for two years after planting.

C.2 Species Eradication

During the growing season after planting seed mixture, eradicate the following species from the seeded areas as soon as they become evident, for two years after planting:

SPECIES COMMON NAME	SPECIES BOTANICAL NAME
Musk thistle	*Carduus nutans*
Spotted knapweed	*Centaurea maculosa*
Canada thistle	*Cirsium arvense*
Phragmites or Common reed	*Phragmites australis*
Cut-leaved teasel	*Dipsacus laciniatus*
Wild parsnip	*Pastinaca sativa*
Bull thistle	*Cirsium vulgare*
Common buckthorn	*Rhamnus cathartica*
Crown vetch	*Coronilla varia*
Narrow-leaf cattail	*Typha angustifolia*
Hybrid cattail	*Typha x glauca*
Garlic mustard	*Alliaria petiolata*
Reed Canary Grass	*Phalaris arundinacea*

Eradicate by hand pulling plants a complete root system. Do not use herbicide.

D Measurement

The department will measure Surveillance and Care for Seeding Special 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.0105.001	Surveillance and Care for Seeding Special	LS

Payment for Surveillance and Care for Seeding Special is full compensation for all the work required under this bid item, including surveillance, care, mowing, and managing and disposing of invasive species and weeds.

97. Survey Project 2704-00-76, Item SPV.0105.007.

A Description

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

Replace standard spec 650.1 with the following:

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

- storm sewer
- subgrade
- base
- curb
- gutter
- curb and gutter
- curb ramps
- pipe culverts
- drainage structures
- structure layout
- bridges
- all retaining wall layout
- pavement
- pavement markings (temporary and permanent)
- barriers (temporary and permanent)
- overhead signs
- freeway and local street lighting
- electrical installations
- supplemental control
- slope stakes
- detention ponds
- traffic signals
- ITS
- FTMS
- paths
- utilities
- conduit
- landscaping elements
- installation of community sensitive design elements
- traffic control items
- fencing
- multi-use path

B (Vacant)

C Construction

Supplement standard spec 650.3.1 (5) with the following:

Global positioning methods will not be allowed to establish the following:

1. Structure layout horizontal or vertical locations.

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

Replace standard spec 650.3.1(6) with the following:

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

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

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

Replace standard spec 650.3.3.1 with the following:

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

Replace standard spec 650.3.3.3.4.1 with the following:

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

Add the following to standard spec 650.3.3.3.6.2 as paragraph (4):

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

D Measurement

Replace standard spec 650.4 with the following:

(1) The department will measure Survey Project (project ID) as a single lump sum unit of work, acceptably completed.

E Payment

Replace standard spec 650.5 with the following:

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.007	Survey Project 2704-00-76	LS

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

sef-650-005 (20180104)

98. Transport and Install State Furnished Traffic Signal Cabinet Braun Road & Wisconn Valley Way, Item SPV.0105.306.

A Description

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

B Materials

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

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

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

C Construction

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

Request a signal inspection of the completed signal installation to the engineer at least five (5) working days prior to the time of the requested inspection. The departments' Region Electrical personnel will perform the inspection.

Coordinate directly with the department's traffic signal cabinet vendor {TAPCO at (262) 814-7327 or rickk@tapconet.com / TCC at 651-439-1737 or mallwood@trafficcontrolcorp} to schedule the cabinet acceptance testing. Coordinate with the department's Electrical Field Unit at (414) 266-1170 to participate in the acceptance testing. The department has final determination of the cabinet acceptance testing date and time.

D Measurement

The department will measure Transport and Install State Furnished Traffic Signal Cabinet Braun Road & Wisconn Valley Way as a single lump sum unit of work, in place and acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.306	Transport and Install State Furnished Traffic Signal Cabinet Braun Road & Wisconn Valley Way	LS

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

SER-658.5 (20170419) ELEC

99. Transport and Install State Furnished Radar Detection System Braun Road & Wisconn Valley Way, Item SPV.0105.307.

A Description

This special provision describes the transporting and installing of department furnished Radar Detection System on monotube poles or arms as the plans show and as follows.

B Materials

Pick up the department furnished Radar System at the department's electrical shop located at 935 South 60th Street, West Allis. Notify the department's electrical field unit (EFU) 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 department furnished pole/arm mounting brackets, extension arms (if required), and radar units per manufacturer recommendations in the locations determined by the department.

Install the power and communication cable to run continuously (without splices) from the traffic signal cabinet to the pole handhole plus an additional 16-feet in each pull box and an extra 10-feet in the pole handhole. Install the detector unit cable whip from the detector unit to the pole handhole. Splice the detector unit cable whip to the power and communication cable in the pole handhole using the provided junction box.

Mark each end of the lead in the traffic signal cabinet and each cable in the pole handhole to indicate the equipment label (i.e. RA1, RA2, etc.) on the plans. For a cabinet that is not operating the signal, the contractor will terminate the ends. If the cabinet is operating the signal, the cabinet wiring will be done by the department.

Notify department's Electrical Shop at (414) 266-1170 upon completion of the installation and aiming of the radar units.

The department will 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 system on site. Notify the department and vendor at least five working days prior to the date of programming. Assist the department and vendor with fine adjusting of the radar units during the radar system programming, if necessary.

D Measurement

The department will measure Transport and Install State Furnished Radar Detection System Braun Road & Wisconn Valley Way 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 items:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.307	Transport and Install State Furnished Radar Detection System Braun Road & Wisconn Valley Way	LS

Payment is full compensation for transporting and installing the radar detection system, cable, mounting hardware, and radar units; and assisting the department and vendor during the radar system programming.

SER-658-004 (20170419)

100. Transport and Install State Furnished Emergency Vehicle Preemption (EVP) Detector Heads with Confirmation Beacons Braun Road & Wisconn Valley Way, Item SPV.0105.308.

A Description

This special provision describes transporting and installing department furnished Emergency Vehicle Preemption (EVP) Detector Heads, Confirmation Beacons, and mounting brackets at Braun Road & Wisconn Valley Way as the plans show and as follows.

B Materials

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

C Construction

Install the EVP detector heads and confirmation beacons as shown on the plans. The department will determine the exact location to ensure that the installation does not create a sight obstruction. Mount the EVP detector heads and wire them per manufacturer instructions. Mount the confirmation beacons. For a cabinet that is not operating the signal, the contractor will terminate the ends and install the discriminators

and card rack in the cabinet. If the cabinet is operating the signal, the cabinet wiring will be done by the department.

Notify the department's Electrical shop at (414) 266-1170 upon completion of the installation of the Emergency Vehicle Preemption (EVP) Detector Heads with Confirmation Beacons.

D Measurement

The department will measure Transport and install State Furnished Emergency Vehicle Preemption (EVP) Detector Heads with Confirmation Beacons Braun Road & Wisconn Valley Way 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.0105.308	Transport and Install State Furnished Emergency Vehicle Preemption (EVP) Detector Heads with Confirmation Beacons Braun Road & Wisconn Valley Way	LS

Payment is full compensation for transporting and installing department furnished Emergency Vehicle Preemption (EVP) Detector Heads, Confirmation Beacons, and mounting brackets.

101. Transport and Install Traffic Signal, Monotube, and Intersection Lighting Materials Braun Road & Wisconn Valley Way, Item SPV.0105.309.

A Description

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

B Materials

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

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 a minimum of five working days prior to picking the materials up.

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

C Construction

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

Provide everything not furnished by the department required to complete the installation as the plans show.

Install the department-furnished components indicated in the special provisions. Also provide high-strength bolts and DTIs, fittings, either aluminum or galvanized steel shims, hardware, and other components the department does not furnish but that are required to complete the installation as the plans show.

D Measurement

The department will measure Transport and Install Traffic Signal, Monotube, and Intersection Lighting Materials Braun Road & Wisconn Valley Way 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.0105.309	Transport and Install Traffic Signal, Monotube, and Intersection Lighting Materials Braun Road & Wisconn Valley Way	LS

Payment is full compensation for transporting and installing the monotube poles/arms and luminaire arms (to be installed on monotubes).

SER-658.2 (20170414) ELEC

102. Transport and Install State Furnished FO Cable Pigtail 8-Ct CTH KR & 100th Avenue/Foxconn Driveway, Item SPV.0105.310; Transport and Install State Furnished FO Cable Pigtail 8-Ct CTH H & CTH KR, Item SPV.0105.311; Transport and Install State Furnished FO Cable Pigtail 8-Ct Braun Road & Foxconn Driveway, Item SPV.0105.312; Transport and Install State Furnished FO Cable Pigtail 8-Ct CTH H & Braun Road, Item SPV.0105.313.

A Description

This special provision describes the transporting and installing of fiber optic cable pigtail 8-ct in traffic signal cabinets.

B Materials

The department will furnish the pre-terminated fiber optic patch panel. The material will be provided with the traffic signal cabinet. The patch panel will have a pre-terminated fiber optic cable pigtail. Provide all patch panel attachment hardware.

C Construction

Install the patch panel on the side of the traffic signal cabinet opposite the electrical service at a location as approved by the engineer. Install the pre-terminated 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.

D Measurement

The department will measure Transport and Install State Furnished FO Cable Pigtail 8-Ct [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.0105.310	Transport and Install State Furnished FO Cable Pigtail 8-Ct CTH KR & 100th Avenue/Foxconn Driveway	LS
SPV.0105.311	Transport and Install State Furnished FO Cable Pigtail 8-Ct CTH H & CTH KR	LS
SPV.0105.312	Transport and Install State Furnished FO Cable Pigtail 8-Ct Braun Road & Foxconn Driveway	LS
SPV.0105.313	Transport and Install State Furnished FO Cable Pigtail 8-Ct CTH H & Braun Road	LS

Payment is full compensation for transporting and installing pre-terminated patch panels, furnishing and installing attachment hardware and locate wire.

103. Removal and Disposal of Invasive Plant Species, Item SPV.0170.001.

A Description

(1) This work shall consist of removing and disposal of invasive plant species, including but not limited to Phragmites, Cut-leaved teasel and Wild Parsnip per the Invasive Species Identification, Classification, and Control Rule (Chapter NR 40, Wis. Adm. Code). Plants shall be removed and disposed from areas designated as follows. It shall include furnishing all necessary materials and performing all necessary work such as excavating topsoil, cutting stems, removing individual plants including roots, disposing of plants, and such work necessary and incidental to complete the item according to the plans, specifications, and contract.

B (Vacant)

C Construction

(1) The WDNR Liaison will determine locations of invasive plant species.

C.1 Removing and Disposing of Phragmites (Common Reed)

(1) All phragmite plants shall be removed from areas designated by the WDNR Liaison. Removal of phragmites shall include removal of the entire plant and root system. Removal shall be performed by removal of all existing topsoil and plant biomass from the areas designated by the WDNR Liaison. Topsoil and biomass removed from invasive plant areas shall be kept in a separate stockpile than topsoil intended for reuse on the project under the Salvaged Topsoil item.

(2) All plants removed shall be disposed either on-site under a minimum of 5 feet of fill or plants shall be taken to a solid waste landfill. Transport of plants to any location other than a licensed landfill shall require approval by the WisDNR. Disposal of plants under fill or at a licensed landfill shall occur within 1 day of removal.

C.2 Removing and Disposing of Cut-leaved Teasel and/or Wild Parsnip

(1) All Cut-leaved Teasel and/or Wild Parsnip plants shall be removed from areas designated by the WDNR Liaison. Removal of Cut-leaved Teasel and Wild Parsnip shall by cut at the stem or completely excavated. Removal shall be performed by either removal of each individual plant by hand or by removal of all existing topsoil and plant biomass from the areas designated by the WDNR Liaison. If excavation methods are used to remove plants, the topsoil shall be kept in a separate stockpile than topsoil intended for reuse on the project under the Salvaged Topsoil item.

(2) All plants removed shall be disposed either on-site under a minimum of 5 feet of fill or plants shall be taken to a solid waste landfill. Transport of plants to any location other than a licensed landfill shall require approval by the WisDNR. Disposal of plants under fill or at a licensed landfill shall occur within 1 day of removal.

C.3 Wild Parsnip Safety

(1) Care shall be taken when handling Wild Parsnip. When sap contacts skin in the presence of sunlight, it can result in severe rashes, blisters, and discoloration of the skin (phytophotodematitis). Wear gloves, long sleeves, and long pants when handling this species.

C.3 404 Permit

(1) Areas of invasive species designated by the WDNR Liaison may be outside of wetland fill areas covered under the 404 permit. Excavation shall not be performed in these areas. For Cut-leaved Teasel and Wild Parsnip in these areas, the plants shall be cut at the stem, removed and disposed according to Section C.2.

C.5 DNR Contact

(1) A minimum of two weeks prior to excavation within invasive plant species areas, contact WisDNR for identification and delineation of invasive species in the field. The DNR contact is:

Kristina Betzold
Environmental Analysis and Review Specialist
Wisconsin Department of Natural Resources
2300 North Dr. Martin Luther King Jr. Drive
Milwaukee, WI 53212
Phone: (414) 507-4946
krisitna.betzold@wisconsin.gov

D Measurement

The department will measure Removal and Disposal of Invasive Plant Species by the full 100-foot station acceptably completed, measured along the roadway reference line with each full 100-foot station starting and ending at a +00 station. The department will measure along the project reference line and will apply for a removal and disposal of invasives required from the outside topsoil removal limits.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0170.001	Removal and Disposal of Invasive Plant Species	STA

(2) Payment is full compensation for removing, stockpiling, excavating, loading, hauling, and either on-site disposal or licensed landfill disposal of these invasive plants.

If invasive plants are removed by excavation methods, the department will pay for restoring topsoil under the Salvaged Topsoil or Topsoil items.

104. Topsoil Special, Item SPV.0180.001.

A Description

This special provision section describes furnishing, placing, spreading, and finishing humus-bearing soil, adapted to sustain plant life, commonly known as topsoil, from locations the contractor furnishes beyond the limits of the right-of-way.

This special provision also describes removing topsoil from the sites of proposed roadway excavations and embankments in quantities and depths available and necessary to cover the work slopes. This work also includes reclamation, placing, spreading, and finishing of this topsoil.

B Materials

Furnish material that is relatively free from large roots, sticks, weeds, brush, stones, litter, and waste products.

Furnish material, either obtained offsite, or material obtained within project limits, consisting of loam, sandy loam, silt loam, silty clay loam, or clay loam humus-bearing soils adapted to sustain plant life. Do not use surface soils from ditch bottoms, drained ponds, and eroded areas, or soils which are supporting growth of NR 40 listed plants and noxious weeds or other undesirable vegetation. Ensure that the material conforms to the following:

Topsoil Requirements	Minimum Range	Maximum Range
Material Passing 2.00 mm (#10) Sieve[1]	90%	100%
PH Range	6.0	8.0
Organic Matter[2]	5%	20%
Clay	5%	30%
Silt	10%	70%
Sand and Gravel	10%	70%

[1] See standard spec 625.3.3 for sieve requirements when using either sod or seed mixture 40.

[2] Organic matter determined by loss on ignition test of samples oven dried to constant weight at 212 F (100 C).

C Construction

C.1 Preparing the Roadway for Topsoil

Undercut or underfill all areas designated to receive topsoil to a degree that if covered to the required depth with topsoil the finished work conforms to the required lines, grades, slopes and cross sections the plans and drawings show.

C.2 Processing Topsoil

Mow topsoil procurement areas to a height of approximately 6 inches. Remove litter such as brush, rock, and other materials that will interfere with subsequent vegetation establishment.

Strip off the humus-bearing soil. Take care to minimize removing the underlying sterile soil. Then stockpile the topsoil on the right-of-way or place it directly on the designated areas.

Obtain topsoil from embankment areas outside the roadway foundation only if that additional material is required to cover the slopes, and conforms to the requirements of section B in this special provision. Use excess topsoil on the project or dispose of as specified in standard spec 205.3.12.

C.3 Placing Topsoil

After preparing and finishing the areas designated for topsoil to the required lines, grades, slopes and cross section, place and spread the topsoil to a uniform depth as the plans show or the contract requires. If no depth is shown, place and spread the topsoil to a minimum depth of 4 inches in rural areas and a minimum depth of 6 inches in urban areas, or as the engineer designates.

Break down all clods and lumps using appropriate equipment to provide a uniformly textured soil.

Where using either sod or seed mixture 40 ensure that, for the upper 2 inches, 100 percent of the material passes a one-inch sieve and at least 90 percent passes the No. 10 sieve.

Remove rocks, twigs, foreign material, and clods that cannot be broken down. Dress the entire surface to present a uniform appearance. The engineer will not require rolling.

If light sandy soils are covered with heavier clay bearing loam topsoil, then mix or blend the 2 types of soils to a more or less homogeneous mixture by using the appropriate equipment.

D Measurement

The department will measure Topsoil Special by the square yard, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.001	Topsoil Special	SY

Payment for Topsoil Special is full compensation for removing, stockpiling, reclaiming, providing, processing, excavating, loading, hauling, and placing this material; and for undercutting excavations, or underfilling embankments necessary to receive this material. The department will make no deductions from the Excavation bid items for quantities of Topsoil Special obtained from cut sections. The department will not measure or pay for volumes of Topsoil Special obtained from the sites of proposed embankments under the Excavation bid items. Additionally, the department will make no allowance, adjustment, or measurement for payment under the Excavation bid items for undercutting cut sections necessary to receive Topsoil Special. The department will not measure and pay for volumes of topsoil placed under the Roadway Embankment bid item.

If an area is damaged by erosion after partial acceptance, the department will pay for restoring topsoil in these areas at a unit price determined by multiplying the contract unit price bid for Topsoil multiplied by 3, the department will pay for restoration under the Restoration Post Acceptance Topsoil administrative item.

The department will not pay for removing topsoil from outside the roadway foundation in embankment areas unless that material is necessary to cover the slopes.

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105. Mulching Special, Item SPV.0180.002.

A Description

This special provision describes supplying and installing special mulching for Seeding Special areas as indicated on the plan in accordance with standard spec 627 and the special provisions provided herein.

B Materials

Provide state certified “weed-free” mulching material for areas requiring mulch. Provide engineer mulch certification prior to delivery to the site.

C Construction

Place mulch the same day of Seeding Special following Method C of the Standard Specifications. Where required, uniformly spread mulch over the seeded zones as indicated on the plan to a loose depth of ½ to 1 inch by blowing from a machine, by hand, or as directed by the engineer.

D Measurement

The department will measure Mulching Special by the square yard of mulching, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.002	Mulching Special	SY

Payment is full compensation for furnishing and installing Mulching Special.

106. Topsoil Special for Prairie Seeding, Item SPV.0180.003.

A Description

Use Topsoil Special for Prairie Seeding for the Seeding Special (Wet Mesic Prairie and Mesic Prairie) seeding.

B Materials

Provide Topsoil Special for Prairie Seeding consisting of: clean topsoil free of debris, with no weed seed, including reed canary grass, purple loosestrife, box elder, buckthorn species, Canada thistle, garlic mustard, phragmites (tall reed grass), or other invasive species.

C Construction

Place Topsoil Special for Prairie Seeding to a minimum depth of 8 inches.

D Measurement

The department will measure Topsoil Special for Prairie Seeding by the square yard of topsoil, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.003	Topsoil Special for Prairie Seeding	SY

Payment for Topsoil Special for Prairie Seeding is full compensation for providing, excavating, loading, hauling and placing this material; and for undercutting excavations, or underfilling embankments necessary to receive this material. The department will make no allowance, adjustment, or measurement for payment under the Excavation bid items for undercutting cut sections, or underfilling embankments.

ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

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

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

Payment to Lower-Tier Subcontractors

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

Release of Routine Retainage

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

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

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

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

ADDITIONAL SPECIAL PROVISIONS 5

Fuel Cost Adjustment

A Description

Fuel Cost Adjustments will be applied to partial and final payments for work items categorized in Section B as a payment to the contractor or a credit to the department. ASP-5 shall not apply to any force account work.

B Categories of Work Items

The following items and Fuel Usage Factors shall be used to determine Fuel Cost Adjustments:

(1) Earthwork.		Unit	Gal. Fuel Per Unit
205.0100	Excavation Common	CY	0.23
205.0200	Excavation Rock	CY	0.39
205.0400	Excavation Marsh	CY	0.29
208.0100	Borrow	CY	0.23
208.1100	Select Borrow	CY	0.23
209.1100	Backfill Granular Grade 1	CY	0.23
209.1500	Backfill Granular Grade 1	Ton	0.115
209.2100	Backfill Granular Grade 2	CY	0.23
209.2500	Backfill Granular Grade 2	Ton	0.115
350.0102	Subbase	CY	0.28
350.0104	Subbase	Ton	0.14
350.0115	Subbase 6-Inch	SY	0.05
350.0120	Subbase 7-Inch	SY	0.05
350.0125	Subbase 8-Inch	SY	0.06
350.0130	Subbase 9-Inch	SY	0.07
350.0135	Subbase 10-Inch	SY	0.08
350.0140	Subbase 11-Inch	SY	0.09
350.0145	Subbase 12-Inch	SY	0.09

C Fuel Index

A Current Fuel Index (CFI) in dollars per gallon will be established by the Department of Transportation for each month. The CFI will be the price of No. 2 fuel oil, as reported in U.S. Oil Week, using the first issue dated that month. The CFI will be the average of prices quoted for Green Bay, Madison, Milwaukee and Minneapolis.

The base Fuel Index (BFI) for this contract is $2.15 per gallon.

D Computing the Fuel Cost Adjustment

The engineer will compute the ratio CFI/BFI each month. If the ratio falls between 0.85 and 1.15, inclusive, no fuel adjustment will be made for that month. If the ratio is less than 0.85 a credit to the department will be computed. If the ratio is greater than 1.15 additional payment to the contractor will be computed. Credit or additional payment will be computed as follows:

(1) The engineer will estimate the quantity of work done in that month under each of the contract items categorized in Section B.

(2) The engineer will compute the gallons of fuel used in that month for each of the contract items categorized in Section B by applying the unit fuel usage factors shown in Section B.

(3) The engineer will summarize the total gallons (Q) of fuel used in that month for the items categorized in Section B.

(4) The engineer will determine the Fuel Cost Adjustment credit or payment from the following formula:

$$FA = \left(\frac{CFI}{BFI} - 1\right) x\ Q\ x\ BFI$$

(plus is payment to contractor; minus is credit to the department)

Where	FA	=	Fuel Cost Adjustment (plus or minus)
	CFI	=	Current Fuel Index
	BFI	=	Base Fuel Index
	Q	=	Monthly total gallons of fuel

E Payment

A Fuel Cost Adjustment credit to the department will be deducted as a dollar amount each month from any sums due to the contractor. A Fuel Cost Adjustment payment to the contractor will be made as a dollar amount each month.

Upon completion of the work under the contract, any difference between the estimated quantities and the final quantities will be determined. An average CFI, calculated by averaging the CFI for all months that fuel cost adjustment was applied, will be applied to the quantity differences. The average CFI shall be applied in accordance with the procedure set forth in Section D.

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

Make the following revisions to the standard specifications:

107.17.1 General

Replace paragraph seven with the following effective with the December 2018 letting:

(7) Have a professional engineer registered in the state of Wisconsin sign and seal the shop drawings. At least 30 calendar days before starting falsework, form, or shoring construction; submit a PDF file of shop drawings to the railroad's chief engineering officer and to the engineer. The engineer and the railroad may review the shop drawings. If the engineer or the railroad finds the shop drawings unsatisfactory, the contractor shall make the required changes. A satisfactory shop drawing review does not relieve the contractor of responsibility and liability for the structural integrity and proper functioning of the falsework, forms, or shoring.

109.1.1 General

Replace the entire text with the following effective with the January 2019 letting:

(1) The engineer will use the US standard system to measure all work completed under the contract. The engineer will determine quantities of materials the contractor furnishes and work the contractor performs using measurement methods and computations conforming to standard engineering practice, modified to meet department requirements. The engineer will document these measurements using department procedures.

(2) The engineer will measure the work as the contract measurement subsection for individual items specifies. The department will measure the actual quantities of work the contractor acceptably completes and make final payment based on those actual measured quantities except as follows:

1. If the measurement subsection for a bid item specifically restricts the quantity measured for payment or allows for use of conversion factors.
2. If the engineer executes a contract change order modifying the method of measurement for specific bid items, the engineer will measure the quantities of applicable bid items for payment using the change order methods.
3. If the engineer, under 105.3.1(2), approves a contractor-requested plan dimension change between US standard and SI metric dimensions, the engineer will measure whichever of the following is less:
    - Actual quantities constructed.
    - Quantities derived from the original plan dimensions.
4. For substitutions made under 106.2.3 between US standard and SI metric products, the engineer will measure the actual quantities of the substitute products using the original contract measuring system.

305.2.1 General

Replace paragraph two with the following effective with the December 2018 letting:

(2) Where the contract specifies or allows 1 1/4-inch base, do not place reclaimed asphalt, reprocessed material, or blended materials below virgin aggregate materials unless the contract specifies or the engineer allows in writing. The department will allow virgin aggregate above reclaimed asphalt, reprocessed material, or blended materials in shoulder areas adjacent to concrete pavement.

420.3.2.1 General

Replace paragraph one with the following effective with the December 2018 letting:

(1) Use self-propelled grinding machines with depth, grade, and slope controls designed for grinding and texturing concrete. Equip grinding machines with diamond blades and a vacuuming system capable of removing liquid and solid residue from the ground surface. Shroud the machine to prevent discharging loosened material into adjacent work areas or live traffic lanes. Provide the specified effective wheelbase, defined as the center of the front to center of the rear main support wheels.

420.3.2.2 Continuous Grinding

Replace paragraph one with the following effective with the December 2018 letting:

(1) Under the Continuous Diamond Grinding Concrete Pavement bid item, ensure that the grinding machine, including the grinding head, weighs 35,000 pounds or more, will grind a strip at least 4 feet wide, and has an effective wheel base of 25 feet or more. For pavements with a design speed less than 40 miles per hour and areas difficult to access, the contractor may use equipment with an effective wheel base of 12 feet or more.

450.3.2.8 Jointing

Replace paragraphs three through five with the following effective with the December 2018 letting:

(3) Construct notched wedge longitudinal joints for mainline paving if the pavement thickness conforms to the minimums specified in 460.3.2, unless the engineer directs or allows an alternate joint. Construct the wedge using a slope no steeper than 3:1. Extend the wedge 12 inches beyond the normal lane width, or as the engineer directs. Ensure that the wedge for all layers directly overlaps and slopes in the same direction.

(4) Locate the joint at the pavement centerline for 2-lane roadways, or at lane lines if the roadway has more than 2 lanes. Construct a vertical notch 1/2-inch to 3/4-inch high on the centerline or lane line at the top of each wedge. Place a 1/2-inch to 3/4-inch notch at the outside bottom edge of the wedge after compacting each layer. Align the finished longitudinal joint line of the upper layer with the centerline or lane line.

(5) Construct the wedge for each layer using an engineer-approved strike-off device that will provide a uniform slope and will not restrict the main screed. Shape and compact the wedge with a weighted steel side roller wheel the same width as the wedge. Apply a tack coat to the wedge surface and both notches before placing the adjacent lane.

455.2.4.3 Emulsified Asphalts

Replace paragraph two with the following effective with the December 2018 letting:

(2) The bill of lading for emulsified asphalts shall indicate the asphalt content of the original emulsion and dilution rate of the additional water added to the original emulsion. If undiluted samples are not available, test the diluted material and modify AASHTO M140, M208, or M316 to reflect properties resulting from dilution of the asphalt.

460.2.8.3.1.4 Department Verification Testing Requirements

Replace paragraph three with the following effective with the December 2018 letting:

(3) The department will perform testing conforming to the following standards:

Bulk specific gravity (G_{mb}) of the compacted mixture according to AASHTO T166.

Maximum specific gravity (G_{mm}) according to AASHTO T209.

Air voids (V_a) by calculation according to AASHTO T269.

VMA by calculation according to AASHTO R35.

Asphalt content by ignition oven according to AASHTO T308 as modified in CMM 8-36.6.3.6, chemical extraction according to AASHTO T-164, or Asphalt Analyzer™ according to manufacturer recommendations.

460.2.8.3.1.6 Acceptable Verification Parameters

Replace paragraph one with the following effective with the December 2018 letting:

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

- Va is within a range of 2.0 to 4.3 percent. For SMA, Va is within a range of 2.7 to 5.3 percent.
- VMA is within minus 0.5 of the minimum requirement for the mix design nominal maximum aggregate size.
- Asphalt content is within minus 0.3 percent of the JMF.

460.2.8.3.1.7 Dispute Resolution

Replace paragraph one with the following effective with the December 2018 letting:

(1) When QV test results do not meet the specified limits for 100 percent pay, the bureau's AASHTO accredited laboratory and certified personnel will referee test the retained portion of the QV sample and the retained portion of the required forward and backward QC retained samples according to CMM 8-36.

460.5.2.1 General

Replace paragraphs five and six with the following effective with the December 2018 letting:

(5) The department will reduce pay for nonconforming QMP HMA mixtures as specified in 460.2.8.2.1.7, starting from the stop point to the point when the running average of 4 is back inside the warning limits. The engineer will determine the quantity of material subject to pay reduction based on the testing data and an inspection of the completed pavement. The department will reduce pay as follows:

PAYMENT FOR MIXTURE *[1] [2] [3]*

ITEM	PRODUCED WITHIN WARNING BANDS	PRODUCED OUTSIDE JMF LIMITS
Gradation	90%	75%
Asphalt Content *[4]*	___	___
Air Voids	70%	50%
VMA	90%	75%

[1] For projects or plants where the total production of each mixture design requires less than 4 tests refer to CMM 8-36.

[2] Payment is in percent of the contract unit price for the HMA Pavement bid item. The department will reduce pay based on the nonconforming property with lowest percent pay. If the quantity of material subject to pay adjustment based on the running average of 4 is also subject to pay adjustment resulting from dispute resolution in accordance with 460.2.8.3.1.7, the department will apply the single pay adjustment resulting in the lowest percent pay.

[3] In addition to any pay adjustment listed in the table above, the department will adjust pay for nonconforming binder under the Nonconforming QMP Asphaltic Material administrative item. The department will deduct 25 percent of the contract unit price of the HMA Pavement bid item per ton of pavement placed with nonconforming PG binder the engineer allows to remain in place.

[4] The department will not adjust pay based on a running average of 4 asphalt content tests; however, corrective action will be applied to nonconforming material according to 460.2.8.2.1.7.

(6) If during a QV dispute resolution investigation the department discovers unacceptable mixture defined by one or more of the following:

- Va greater than 5.0 or less than 1.5.
- VMA more than 1.0 below the minimum allowed in table 460-1.
- AC more than 0.5 % below the JMF target.

Remove and replace the material, or if the engineer allows the mixture to remain in place, the department will pay for the quantity of affected material at 50 percent of the contract price.

506.3.2 Shop Drawings

Replace paragraph four with the following effective with the December 2018 letting:

(4) Ensure that the fabricator submits a PDF file of shop drawings for railroad structures to the railroad company's chief engineering officer upon contract completion.

646.3.1.2 Liquid Marking

Replace paragraph five with the following effective with the January 2019 letting:

(5) Apply liquid marking and glass beads across the line at or exceeding the following:

LIQUID MARKING	PAVEMENT TYPE	THICKNESS (mils)	BEAD APPLICATION (pounds per gallon)
Paint	all	16	8
Epoxy	SMA, seal coats, and polymer overlays	25	25
Epoxy	all other	20	22.5
Wet Reflective Epoxy	all	20	18

646.3.2.3.2 Wet Reflective Epoxy

Replace paragraph five with the following effective with the January 2019 letting:

(1) Apply wet reflective epoxy binder in a grooved slot. and provide a double drop bead system as follows:

- First: wet reflective/recoverable elements at the application rate specified for the product chosen from the department's APL.
- Second: glass beads at the application rate specified in 646.3.1.2(5).

650.3.1 General

Replace the entire text with the following effective with the December 2018 letting:

(1) Department and contractor responsibilities for construction staking are specified in 105.6. Conform to 105.6 and the additional requirements specified here in 650.3 for the individual contractor-staking bid items the contract includes.

(2) Protect and preserve known property and survey marks and land monuments as specified in 107.11.3. The contract may require related work under the 621 bid items.

(3) Obtain or calculate benchmark data, grades, and alignment from plan information. The engineer will furnish data for the horizontal and vertical control points, control point ties, horizontal alignments, profiles, and elevations. Reestablish, set additional, and maintain the horizontal and vertical control points and control point ties, as needed for bid items.

(4) Check horizontal and vertical information including but not limited to alignments, locations, elevations, and dimensions, that either the plans show or the engineer provides, for compatibility with existing field conditions. Conduct similar compatibility checks and accuracy checks of horizontal and vertical positions either the department or the contractor establishes in the field.

(5) Perform survey work using conventional methods, or AMG methods capable of achieving the lines and grades the plans show for the work in question. Establish additional benchmarks and control points as necessary to support the method of operation.

650.3.1.1 Staking

(1) Furnish, set, reference, and maintain stakes and markings necessary to establish the alignment, location, benchmarks, elevations, and continuous profile-grades for road and structure work as needed for bid items. Supervise and coordinate construction staking.

(2) Maintain neat, orderly, and complete survey notes, drawings, and computations used in establishing the lines and grades. Make the survey notes and computations available to the engineer within 24 hours, upon request, as the work progresses.

(3) Furnish surveying equipment, stakes, flags, pins, lath, whiskers, and other materials necessary to perform this work, subject to the engineer’s approval.

650.3.1.2 Automated Machine Guidance

650.3.1.2.1 General

(1) The contractor may substitute AMG for conventional staking on all or part of the work under the individual staking bid items. Coordinate with the engineer throughout the course of construction to ensure that work performed using AMG conforms to the contract tolerances and that the methods employed conform to the contractor's AMG work plan and accepted industry standards. Revert to conventional staking methods for all or part of the work at any point during construction if AMG is producing unacceptable results.

650.3.1.2.2 AMG Work Plan

(1) Submit a comprehensive written AMG work plan for department review at least 5 business days before the preconstruction conference. In that plan discuss how AMG technology will be integrated into other

technologies employed on the project. List the staking bid items that will have work performed using AMG and, for each bid item listed, include the following:

1. Designate which portions of the contract will be done using AMG and which portions will be done using conventional staking.
2. Designate a single staff person as the primary contact for AMG technology issues.
3. List and map the primary and secondary control points required under 105.6.2 enveloping the site.
4. Describe the contractor's quality control procedures. Include the frequency and type of checks performed to ensure that the work conforms to the contract plans.

(2) The engineer will review the plan to determine if it conforms to the contract. Do not perform AMG work until the engineer approves the governing portion of the AMG workplan. Perform the work as the contractor's AMG work plan provides. Update the plan as necessary.

650.3.1.2.3 Geometric and Surface Information

650.3.1.2.3.1 Department Responsibilities

(1) At any time after the contract is awarded the contractor may request the contractor data packet. The department will provide the packet within 5 business days of receiving the contractor's request.

650.3.1.2.3.2 Contractor Responsibilities

(1) Develop and maintain a contractor construction model for areas of the project employing AMG. Confirm that the resulting model agrees with the contract plans.

(2) If the engineer requests, provide the construction model to the department in LandXML or other engineer-approved format.

650.3.1.2.4 Managing and Updating Information

(1) Notify the department of any errors or discrepancies in department-provided information. The department will determine what revisions may be required. The department will revise the contract plans, if necessary, to address errors or discrepancies that the contractor identifies. The department will provide the best available information related to those contract plan revisions.

(2) Revise the construction model as required to support construction operations and to reflect any contract plan revisions the department makes. Perform checks to confirm that the revised construction model agrees with the contract plan revisions. If the engineer requests, provide construction model updates to the engineer. The department will pay for costs incurred to incorporate contract plan revisions as extra work.

650.3.1.2.5 Construction Checks

(1) Check the work against the plan elevation at randomly selected points on cross-sections located at stations evenly divisible by 100 at the frequency the engineer approved as a part of the AMG work plan. Submit the results of these random checks to the engineer daily. Notify the engineer immediately if a check exceeds the tolerances specified in 650.3.1.2.6 below.

(2) Check the work at additional points as the engineer directs. The department may conduct periodic independent checks.

650.3.1.2.6 Construction Tolerances

(1) Ensure that the finished work vertically matches existing or other completed features. Ensure that the work conforms to revised plan elevations as follows:

- Subgrade : +/- 0.10 feet.
- Base : within the tolerance specified in 301.3.4.1(2).

650.3.3 Subgrade

Retitle and replace the entire text with the following effective with the December 2018 letting:

650.3.3 Subgrade Staking

(1) Set construction stakes or marks at intervals of 100 feet, or more frequently, for rural sections and at intervals of 50 feet, or more frequently, for urban sections. Include additional stakes at each cross-section as necessary to match the plan cross-section, achieve the required accuracy, and to support construction operations. Also set and maintain stakes as necessary to establish the horizontal and vertical positions of intersecting road radii, auxiliary lanes, horizontal and vertical curves, and curve

transitions. Locate stakes to within 0.25 feet horizontally and establish the grade elevation to within 0.03 feet vertically.

Errata

520.3.3 Laying Pipe

Correct errata by replacing "sections" with "joints" to clarify the intent that the last 3 joints need ties.

(5) Provide joint ties on the upstream and downstream ends of circular and horizontal elliptical concrete culvert and concrete cattle pass installations. Tie the next 3 pipe joints or, if using apron endwalls, the endwall joint and the last 2 pipe joints. Ties are not required on culverts with masonry endwalls unless the plans show otherwise.

608.3.3 Laying Pipe

Correct errata by replacing "sections" with "joints" to clarify the intent that the last 3 joints need ties.

(5) Provide joint ties on concrete storm sewer system infall and outfall pipes. Tie the last 3 pipe joints or, if using apron endwalls, the endwall joint and the next 2 pipe joints. Ties are not required on installations with masonry endwalls unless the plans show otherwise.

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.

NOTE: CRCS Prime Contractor payment is currently not automated and will need to be manually loaded into the Civil Rights Compliance System. Copies of prime contractor payments received (check or ACH) will have to be forwarded to paul.ndon@dot.wi.gov within 5 days of payment receipt to be logged manually.

***Additionally, for information on Subcontractor Sublet assignments, Subcontractor Payments and Payment Tracking, please refer to the CRCS Payment and Sublets manual at:

https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-manual.pdf

Effective January 2019 Letting ASP 9

ADDITIONAL SPECIAL PROVISION 9
Electronic Certified Payroll or Labor Data Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) to electronically submit certified payroll reports for contracts with federal funds and labor data for contracts with state funds only. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx

(2) Ensure that all tiers of subcontractors, including all trucking firms, either submit their weekly certified payroll reports (contracts with federal funds) or labor data (contracts with state funds only) electronically through CRCS. These payrolls or labor data 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 their submittals. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Paul Ndon at (414) 438-4584 to schedule the training.

(4) The department will reject all paper submittals 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/labor data from their computer system into CRCS should have their payroll coordinator contact Paul Ndon at paul.ndon@dot.wi.gov. Not every contractor's payroll system is capable of producing export files. For details, see Section 4.8 CPR Auto Submit (Data Mapping) on pages 49-50; 66-71 of the CRCS Payroll Manual at:

https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf

Non-discrimination Provisions

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

a. Withholding payments to the contractor under the contract until the contractor complies; and/or
b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

Effective August 2015 letting

BUY AMERICA PROVISION

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

https://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf

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

https://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	108.4400 CPM Progress Schedule	1.000 EACH	_____.____	_____.____
0004	201.0105 Clearing	47.000 STA	_____.____	_____.____
0006	201.0205 Grubbing	47.000 STA	_____.____	_____.____
0008	203.0100 Removing Small Pipe Culverts	5.000 EACH	_____.____	_____.____
0010	203.0200 Removing Old Structure (station) 001. 269+65	LS	LUMP SUM	_____.____
0012	204.0170 Removing Fence	959.000 LF	_____.____	_____.____
0014	204.0185 Removing Masonry	6.000 CY	_____.____	_____.____
0016	204.0280 Sealing Pipes	1.000 EACH	_____.____	_____.____
0018	204.9060.S Removing (item description) 001. Bulkhead	2.000 EACH	_____.____	_____.____
0020	204.9090.S Removing (item description) 001. Draintile	4,375.000 LF	_____.____	_____.____
0022	204.9090.S Removing (item description) 002. 60-Inch Culvert Pipe	16.000 LF	_____.____	_____.____
0024	205.0100 Excavation Common	228,316.000 CY	_____.____	_____.____
0026	205.0501.S Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	6,050.000 TON	_____.____	_____.____
0028	213.0100 Finishing Roadway (project) 001. 2704-00-76	1.000 EACH	_____.____	_____.____
0030	305.0120 Base Aggregate Dense 1 1/4-Inch	36,058.000 TON	_____.____	_____.____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0032	311.0110 Breaker Run	86,131.000 TON	_____.____	_____.____
0034	415.0100 Concrete Pavement 10-Inch	77,860.000 SY	_____.____	_____.____
0036	415.5110.S Concrete Pavement Joint Layout	1.000 LS	_____.____	_____.____
0038	416.0610 Drilled Tie Bars	78.000 EACH	_____.____	_____.____
0040	416.0620 Drilled Dowel Bars	212.000 EACH	_____.____	_____.____
0042	416.1010 Concrete Surface Drains	14.400 CY	_____.____	_____.____
0044	520.8000 Concrete Collars for Pipe	4.000 EACH	_____.____	_____.____
0046	522.0118 Culvert Pipe Reinforced Concrete Class III 18-Inch	38.000 LF	_____.____	_____.____
0048	522.0124 Culvert Pipe Reinforced Concrete Class III 24-Inch	31.000 LF	_____.____	_____.____
0050	522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	1.000 EACH	_____.____	_____.____
0052	522.1015 Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	4.000 EACH	_____.____	_____.____
0054	522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	3.000 EACH	_____.____	_____.____
0056	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	1.000 EACH	_____.____	_____.____
0058	522.1030 Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	1.000 EACH	_____.____	_____.____
0060	522.1036 Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	1.000 EACH	_____.____	_____.____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0062	522.1060 Apron Endwalls for Culvert Pipe Reinforced Concrete 60-Inch	3.000 EACH	_____.____	_____.____
0064	522.2629 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 29x45-Inch	1.000 EACH	_____.____	_____.____
0066	522.2634 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 34x53-Inch	1.000 EACH	_____.____	_____.____
0068	522.2653 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 53x83-Inch	4.000 EACH	_____.____	_____.____
0070	601.0409 Concrete Curb & Gutter 30-Inch Type A	48,326.000 LF	_____.____	_____.____
0072	601.0555 Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	1,293.000 LF	_____.____	_____.____
0074	602.0410 Concrete Sidewalk 5-Inch	14,338.000 SF	_____.____	_____.____
0076	602.0505 Curb Ramp Detectable Warning Field Yellow	480.000 SF	_____.____	_____.____
0078	606.0100 Riprap Light	18.000 CY	_____.____	_____.____
0080	606.0200 Riprap Medium	689.500 CY	_____.____	_____.____
0082	606.0300 Riprap Heavy	140.000 CY	_____.____	_____.____
0084	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	4,554.000 LF	_____.____	_____.____
0086	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	6,079.000 LF	_____.____	_____.____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0088	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	466.000 LF	_____.____	_____.____
0090	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	4,244.000 LF	_____.____	_____.____
0092	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	218.000 LF	_____.____	_____.____
0094	608.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	1,829.000 LF	_____.____	_____.____
0096	608.0360 Storm Sewer Pipe Reinforced Concrete Class III 60-Inch	2,912.000 LF	_____.____	_____.____
0098	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	4,591.000 LF	_____.____	_____.____
0100	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	183.000 LF	_____.____	_____.____
0102	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	725.000 LF	_____.____	_____.____
0104	608.2334 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 34x53-Inch	307.000 LF	_____.____	_____.____
0106	608.2424 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	1,329.000 LF	_____.____	_____.____
0108	608.2429 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 29x45-Inch	493.000 LF	_____.____	_____.____
0110	608.2434 Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 34x53-Inch	920.000 LF	_____.____	_____.____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0112	611.0530 Manhole Covers Type J	1.000 EACH	_____.____	_____.____
0114	611.0535 Manhole Covers Type J-Special	14.000 EACH	_____.____	_____.____
0116	611.0624 Inlet Covers Type H	321.000 EACH	_____.____	_____.____
0118	611.0627 Inlet Covers Type HM	5.000 EACH	_____.____	_____.____
0120	611.0639 Inlet Covers Type H-S	30.000 EACH	_____.____	_____.____
0122	611.2004 Manholes 4-FT Diameter	6.000 EACH	_____.____	_____.____
0124	611.2005 Manholes 5-FT Diameter	39.000 EACH	_____.____	_____.____
0126	611.2006 Manholes 6-FT Diameter	28.000 EACH	_____.____	_____.____
0128	611.2007 Manholes 7-FT Diameter	9.000 EACH	_____.____	_____.____
0130	611.2008 Manholes 8-FT Diameter	13.000 EACH	_____.____	_____.____
0132	611.3003 Inlets 3-FT Diameter	9.000 EACH	_____.____	_____.____
0134	611.3004 Inlets 4-FT Diameter	248.000 EACH	_____.____	_____.____
0136	611.3230 Inlets 2x3-FT	29.000 EACH	_____.____	_____.____
0138	612.0700 Drain Tile Exploration	10,000.000 LF	_____.____	_____.____
0140	616.0206 Fence Chain Link 6-FT	200.000 LF	_____.____	_____.____
0142	616.0700.S Fence Safety	1,000.000 LF	_____.____	_____.____
0144	619.1000 Mobilization	1.000 EACH	_____.____	_____.____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0146	620.0300 Concrete Median Sloped Nose	1,470.000 SF	_____.____	_____.____
0148	623.0200 Dust Control Surface Treatment	107,494.000 SY	_____.____	_____.____
0150	624.0100 Water	6,289.000 MGAL	_____.____	_____.____
0152	628.1104 Erosion Bales	300.000 EACH	_____.____	_____.____
0154	628.1504 Silt Fence	29,130.000 LF	_____.____	_____.____
0156	628.1520 Silt Fence Maintenance	29,130.000 LF	_____.____	_____.____
0158	628.1905 Mobilizations Erosion Control	6.000 EACH	_____.____	_____.____
0160	628.1910 Mobilizations Emergency Erosion Control	10.000 EACH	_____.____	_____.____
0162	628.2004 Erosion Mat Class I Type B	191,500.000 SY	_____.____	_____.____
0164	628.2008 Erosion Mat Urban Class I Type B	8,155.000 SY	_____.____	_____.____
0166	628.6510 Soil Stabilizer Type B	3.750 ACRE	_____.____	_____.____
0168	628.7005 Inlet Protection Type A	456.000 EACH	_____.____	_____.____
0170	628.7010 Inlet Protection Type B	11.000 EACH	_____.____	_____.____
0172	628.7015 Inlet Protection Type C	354.000 EACH	_____.____	_____.____
0174	628.7020 Inlet Protection Type D	101.000 EACH	_____.____	_____.____
0176	628.7504 Temporary Ditch Checks	165.000 LF	_____.____	_____.____
0178	628.7555 Culvert Pipe Checks	66.000 EACH	_____.____	_____.____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0180	628.7560 Tracking Pads	5.000 EACH	_____.____	_____.____
0182	628.7570 Rock Bags	125.000 EACH	_____.____	_____.____
0184	629.0205 Fertilizer Type A	18.000 CWT	_____.____	_____.____
0186	629.0210 Fertilizer Type B	111.000 CWT	_____.____	_____.____
0188	630.0140 Seeding Mixture No. 40	3,450.000 LB	_____.____	_____.____
0190	630.0175 Seeding Mixture No. 75	55.000 LB	_____.____	_____.____
0192	630.0200 Seeding Temporary	3,450.000 LB	_____.____	_____.____
0194	632.0101 Trees (species) (size) (root) 001. Quaking Aspen B&B 2-Inch Cal	39.000 EACH	_____.____	_____.____
0196	632.0101 Trees (species) (size) (root) 002. Swamp White B&B 2-Inch Cal	12.000 EACH	_____.____	_____.____
0198	632.0101 Trees (species) (size) (root) 003. Red Maple B&B 2-Inch Cal	12.000 EACH	_____.____	_____.____
0200	632.0201 Shrubs (species) (size) (root) 001. Red Osier Dogwood Cont 24-Inch HT	39.000 EACH	_____.____	_____.____
0202	632.0201 Shrubs (species) (size) (root) 002. Grey Dogwood Cont 24-Inch HT	39.000 EACH	_____.____	_____.____
0204	632.0201 Shrubs (species) (size) (root) 003. Eastern White Cedar Cont 24-Inch HT	45.000 EACH	_____.____	_____.____
0206	632.9101 Landscape Planting Surveillance and Care Cycles	33.000 EACH	_____.____	_____.____
0208	633.5200 Markers Culvert End	22.000 EACH	_____.____	_____.____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0210	634.0618 Posts Wood 4x6-Inch X 18-FT	81.000 EACH	_____.____	_____.____
0212	637.0620 Sign Flags Permanent Type II	8.000 EACH	_____.____	_____.____
0214	637.1220 Signs Type I Reflective SH	188.000 SF	_____.____	_____.____
0216	637.2210 Signs Type II Reflective H	612.890 SF	_____.____	_____.____
0218	637.2215 Signs Type II Reflective H Folding	96.980 SF	_____.____	_____.____
0220	637.2230 Signs Type II Reflective F	124.000 SF	_____.____	_____.____
0222	638.2602 Removing Signs Type II	4.000 EACH	_____.____	_____.____
0224	638.3000 Removing Small Sign Supports	4.000 EACH	_____.____	_____.____
0226	640.1303.S Pond Liner Clay	3,323.000 CY	_____.____	_____.____
0228	641.8100 Overhead Sign Support (structure) 001. S-51-611	LS	LUMP SUM	_____.____
0230	641.8100 Overhead Sign Support (structure) 002. S-51-612	LS	LUMP SUM	_____.____
0232	641.8100 Overhead Sign Support (structure) 003. S-51-613	LS	LUMP SUM	_____.____
0234	643.0300 Traffic Control Drums	3,350.000 DAY	_____.____	_____.____
0236	643.0420 Traffic Control Barricades Type III	2,500.000 DAY	_____.____	_____.____
0238	643.0705 Traffic Control Warning Lights Type A	5,000.000 DAY	_____.____	_____.____
0240	643.0715 Traffic Control Warning Lights Type C	200.000 DAY	_____.____	_____.____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0242	643.0900 Traffic Control Signs	1,400.000 DAY	_____.____	_____.____
0244	643.0920 Traffic Control Covering Signs Type II	10.000 EACH	_____.____	_____.____
0246	643.5000 Traffic Control	1.000 EACH	_____.____	_____.____
0248	645.0120 Geotextile Type HR	1,495.000 SY	_____.____	_____.____
0250	645.0130 Geotextile Type R	223.200 SY	_____.____	_____.____
0252	646.1020 Marking Line Epoxy 4-Inch	42,449.000 LF	_____.____	_____.____
0254	646.3020 Marking Line Epoxy 8-Inch	1,620.000 LF	_____.____	_____.____
0256	646.5020 Marking Arrow Epoxy	21.000 EACH	_____.____	_____.____
0258	646.5120 Marking Word Epoxy	13.000 EACH	_____.____	_____.____
0260	646.6120 Marking Stop Line Epoxy 18-Inch	217.000 LF	_____.____	_____.____
0262	646.6220 Marking Yield Line Epoxy 18-Inch	24.000 EACH	_____.____	_____.____
0264	646.6464 Cold Weather Marking Epoxy 4-Inch	45,565.000 LF	_____.____	_____.____
0266	646.6468 Cold Weather Marking Epoxy 8-Inch	2,721.000 LF	_____.____	_____.____
0268	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	951.000 LF	_____.____	_____.____
0270	646.8120 Marking Curb Epoxy	129.000 LF	_____.____	_____.____
0272	646.8220 Marking Island Nose Epoxy	4.000 EACH	_____.____	_____.____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0274	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	13,488.000 LF	_____.____	_____.____
0276	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	4,108.000 LF	_____.____	_____.____
0278	652.0800 Conduit Loop Detector	3,182.000 LF	_____.____	_____.____
0280	653.0135 Pull Boxes Steel 24x36-Inch	26.000 EACH	_____.____	_____.____
0282	653.0140 Pull Boxes Steel 24x42-Inch	22.000 EACH	_____.____	_____.____
0284	654.0101 Concrete Bases Type 1	11.000 EACH	_____.____	_____.____
0286	654.0105 Concrete Bases Type 5	53.000 EACH	_____.____	_____.____
0288	654.0110 Concrete Bases Type 10	6.000 EACH	_____.____	_____.____
0290	654.0113 Concrete Bases Type 13	2.000 EACH	_____.____	_____.____
0292	654.0217 Concrete Control Cabinet Bases Type 9 Special	1.000 EACH	_____.____	_____.____
0294	654.0230 Concrete Control Cabinet Bases Type L30	3.000 EACH	_____.____	_____.____
0296	655.0210 Cable Traffic Signal 3-14 AWG	1,666.000 LF	_____.____	_____.____
0298	655.0230 Cable Traffic Signal 5-14 AWG	996.000 LF	_____.____	_____.____
0300	655.0240 Cable Traffic Signal 7-14 AWG	4,261.000 LF	_____.____	_____.____
0302	655.0260 Cable Traffic Signal 12-14 AWG	3,567.000 LF	_____.____	_____.____
0304	655.0270 Cable Traffic Signal 15-14 AWG	512.000 LF	_____.____	_____.____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0306	655.0320 Cable Type UF 2-10 AWG Grounded	1,453.000 LF	_____.____	_____.____
0308	655.0510 Electrical Wire Traffic Signals 12 AWG	10,926.000 LF	_____.____	_____.____
0310	655.0515 Electrical Wire Traffic Signals 10 AWG	5,423.000 LF	_____.____	_____.____
0312	655.0610 Electrical Wire Lighting 12 AWG	1,152.000 LF	_____.____	_____.____
0314	655.0700 Loop Detector Lead In Cable	11,696.000 LF	_____.____	_____.____
0316	655.0800 Loop Detector Wire	12,094.000 LF	_____.____	_____.____
0318	655.0900 Traffic Signal EVP Detector Cable	1,666.000 LF	_____.____	_____.____
0320	656.0200 Electrical Service Meter Breaker Pedestal (location) 301. Braun Road & Wisconn Valley Way	LS	LUMP SUM	_____.____
0322	657.0100 Pedestal Bases	11.000 EACH	_____.____	_____.____
0324	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	53.000 EACH	_____.____	_____.____
0326	657.0420 Traffic Signal Standards Aluminum 13-FT	8.000 EACH	_____.____	_____.____
0328	657.0425 Traffic Signal Standards Aluminum 15-FT	2.000 EACH	_____.____	_____.____
0330	657.0430 Traffic Signal Standards Aluminum 10-FT	1.000 EACH	_____.____	_____.____
0332	658.0173 Traffic Signal Face 3S 12-Inch	26.000 EACH	_____.____	_____.____
0334	658.0174 Traffic Signal Face 4S 12-Inch	3.000 EACH	_____.____	_____.____
0336	658.0416 Pedestrian Signal Face 16-Inch	10.000 EACH	_____.____	_____.____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0338	658.0500 Pedestrian Push Buttons	13.000 EACH	_____._____	_____._____
0340	658.5069 Signal Mounting Hardware (location) 301. Braun Road & Wisconn Valley Way	LS	LUMP SUM	_____._____
0342	659.1125 Luminaires Utility LED C	8.000 EACH	_____._____	_____._____
0344	670.0100 Field System Integrator 001. FTMS	LS	LUMP SUM	_____._____
0346	670.0200 ITS Documentation 001. FTMS	LS	LUMP SUM	_____._____
0348	671.0122 Conduit HDPE 2-Duct 2-Inch	10,555.000 LF	_____._____	_____._____
0350	673.0105 Communication Vault Type 1	12.000 EACH	_____._____	_____._____
0352	673.0200 Tracer Wire Marker Posts	11.000 EACH	_____._____	_____._____
0354	677.0200 Install Camera Assembly	1.000 EACH	_____._____	_____._____
0356	678.0072 Install Fiber Optic Cable Outdoor Plant 72-CT	32,815.000 LF	_____._____	_____._____
0358	678.0300 Fiber Optic Splice	72.000 EACH	_____._____	_____._____
0360	678.0500 Communication System Testing	LS	LUMP SUM	_____._____
0362	715.0415 Incentive Strength Concrete Pavement	23,358.000 DOL	1.00000	23,358.00
0364	715.0710 Optimized Aggregate Gradation Incentive	73,578.000 DOL	1.00000	73,578.00
0366	740.0440 Incentive IRI Ride	19,625.000 DOL	1.00000	19,625.00
0368	SPV.0005 Special 001. Seed Bed Preparation	1.600 ACRE	_____._____	_____._____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0370	SPV.0005 Special 002. Seeding Special	1.600 ACRE	_____.____	_____.____
0372	SPV.0035 Special 001. EBS Excavation	31,723.000 CY	_____.____	_____.____
0374	SPV.0035 Special 002. EBS Backfill	31,723.000 CY	_____.____	_____.____
0376	SPV.0035 Special 003. Roadway Embankment	246,090.000 CY	_____.____	_____.____
0378	SPV.0060 Special 002. Temporary Stone Ditch Checks	20.000 EACH	_____.____	_____.____
0380	SPV.0060 Special 003. Sand Bags	150.000 EACH	_____.____	_____.____
0382	SPV.0060 Special 004. Temporary Sediment Traps	10.000 EACH	_____.____	_____.____
0384	SPV.0060 Special 005. Remove and Relocate Existing Apron Endwall 15-Inch	1.000 EACH	_____.____	_____.____
0386	SPV.0060 Special 006. Remove and Relocate Existing Apron Endwall 24-Inch	1.000 EACH	_____.____	_____.____
0388	SPV.0060 Special 008. Inlet Covers Beehive	9.000 EACH	_____.____	_____.____
0390	SPV.0060 Special 011. Manholes 9-FT	1.000 EACH	_____.____	_____.____
0392	SPV.0060 Special 012. Cover Plates Left In Place	2.000 EACH	_____.____	_____.____
0394	SPV.0060 Special 013. Connect Drain Tile	50.000 EACH	_____.____	_____.____
0396	SPV.0060 Special 020. Pond I Outlet Storm Sewer Structure	1.000 EACH	_____.____	_____.____
0398	SPV.0060 Special 021. Pond J Outlet Storm Sewer Structure	1.000 EACH	_____.____	_____.____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0400	SPV.0060 Special 022. Pond K Outlet Storm Sewer Structure	1.000 EACH	_____.____	_____.____
0402	SPV.0060 Special 023. Slip-In Check Valve for 12-Inch Inside Diameter Pipe	1.000 EACH	_____.____	_____.____
0404	SPV.0060 Special 024. Slip-In Check Valve for 24-Inch Inside Diameter Pipe	3.000 EACH	_____.____	_____.____
0406	SPV.0060 Special 025. Slip-In Check Valve for 30-Inch Inside Diameter Pipe	1.000 EACH	_____.____	_____.____
0408	SPV.0060 Special 026. Slip-In Check Valve for 15-Inch Inside Diameter Pipe	1.000 EACH	_____.____	_____.____
0410	SPV.0060 Special 050. Sign Support Special Mounting	3.000 EACH	_____.____	_____.____
0412	SPV.0060 Special 725. Bioretention Type A	5.000 EACH	_____.____	_____.____
0414	SPV.0060 Special 726. Bioretention Type B	4.000 EACH	_____.____	_____.____
0416	SPV.0075 Special 001. Pavement Cleanup Project 2704-00-76	30.000 HRS	_____.____	_____.____
0418	SPV.0085 Special 001. Seed Mix Special	350.000 LB	_____.____	_____.____
0420	SPV.0090 Special 001. Heavy Duty Silt Fence	2,885.000 LF	_____.____	_____.____
0422	SPV.0090 Special 002. Pipe Underdrain 6-Inch Special	16,010.000 LF	_____.____	_____.____
0424	SPV.0090 Special 003. Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 53x83-In	462.000 LF	_____.____	_____.____
0426	SPV.0090 Special 004. Marking Line Contrast Epoxy 4-Inch	4,738.000 LF	_____.____	_____.____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0428	SPV.0090 Special 005. Marking Line Contrast Epoxy 8-Inch	2,721.000 LF	_____._____	_____._____
0430	SPV.0090 Special 006. Concrete Curb and Gutter 6-Inch Sloped 48-Inch Type A	234.000 LF	_____._____	_____._____
0432	SPV.0105 Special 001. Surveillance and Care for Seeding Special	LS	LUMP SUM	_____._____
0434	SPV.0105 Special 007. Survey Project 2704-00-76	LS	LUMP SUM	_____._____
0436	SPV.0105 Special 306. Trns & Install State Furn Traf Sig Cabinet Braun Rd & WVW	LS	LUMP SUM	_____._____
0438	SPV.0105 Special 307. Trns & Install State Furn Radar Det Sys Braun Rd & WVW	LS	LUMP SUM	_____._____
0440	SPV.0105 Special 308. Trns & Install State Furn EVP Det Heads w/Conf Beacons Braun Rd & WVW	LS	LUMP SUM	_____._____
0442	SPV.0105 Special 309. Trans & Install Traf Sig, Monotube & Inter Lighting Mat Braun Rd & WVW	LS	LUMP SUM	_____._____
0444	SPV.0105 Special 310. Trns & Install St Furn FO Cable Pigtail 8-Ct, CTH KR & 100 Ave/Foxconn Drwy	LS	LUMP SUM	_____._____
0446	SPV.0105 Special 311. Trns & Install St Furn FO Cable Pigtail 8-Ct, CTH H & CTH KR	LS	LUMP SUM	_____._____
0448	SPV.0105 Special 312. Trns & Install St Furn FO Cable Pigtail 8-Ct, Braun Rd & Foxconn Drwy	LS	LUMP SUM	_____._____
0450	SPV.0105 Special 313. Trns & Install St Furn FO Cable Pigtail 8-Ct, CTH H & Braun Road	LS	LUMP SUM	_____._____

Proposal ID: 20190312021 **Project(s):** 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: **Alt Mbr ID:**

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0452	SPV.0170 Special 001. Removal and Disposal of Invasive Plant Species	5.000 STA	_____._____	_____._____
0454	SPV.0180 Special 001. Topsoil Special	199,655.000 SY	_____._____	_____._____
0456	SPV.0180 Special 002. Mulching Special	7,744.000 SY	_____._____	_____._____
0458	SPV.0180 Special 003. Topsoil Special for Prairie Seeding	7,744.000 SY	_____._____	_____._____
	Section: 0001		**Total:**	_____._____
			Total Bid:	**_____._____**

PLEASE ATTACH SCHEDULE OF ITEMS HERE

Wisconsin Department of Transportation

Division of Transportation Systems Development
Bureau of Project Development
4822 Madison Yards Way, 4th Floor South
Madison, WI 53705

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

March 1, 2019

NOTICE TO ALL CONTRACTORS:

Proposal #21: 2704-00-76
Wisconn Valley Way, V MT Pleasant
CTH KR to STH 11
Local Street
Racine County

Letting of March 12, 2019

This is Addendum No. 01, which provides for the following:

Special Provisions:

Revised Special Provisions	
Article No.	Description
5	Prosecution and Progress
11	Utilities

Added Special Provisions	
Article No.	Description
107	Concrete Base Monotube Type 9 & 10 Special Pole, Item SPV.0060.301
108	Installing Poles Type 9S, Item SPV.0060.302
109	Remove Wood Poles, Item SPV.0195.001

Schedule of Items:

Added Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
SPV.0195.001	Remove Wood Poles	TON	0	3	3
SPV.0060.301	Concrete Bases Monotube Type 9 & 10 Special Poles	EACH	0	2	2
SPV.0060.302	Installing Poles Type 9S	EACH	0	2	2

Deleted Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
654.0113	Concrete Bases Type 13	TON	2	-2	0

Plan Sheets:

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
32	Construction Detail (updated “Haul Routes” to access construction site)
204	Traffic Signal Plan (updated plan view and legend)
229	Alignment Diagram (updated bearing call-out)
292	Miscellaneous Quantities (added ‘Utility Removals table)
293	Miscellaneous Quantities (updated ‘Summary of State Furnished Materials’ table)
297	Miscellaneous Quantities (updated ‘Concrete Bases’ table)
301-302	Miscellaneous Quantities (updated ‘Cast Bases, Poles, Standards, Monotubes, Push Buttons, and Luminaires’ table)
335	Plan and Profile (added “Remove Wood Pole” call-out)

Added Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of why sheet was added)
208A	Traffic Signal Plan (added ‘Type 9 & 10 Traffic Signal Base’ detail)

Delete Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of why sheet was deleted)
371	Standard Detail Drawing-Concrete Base Type 13 (Type 13 base no longer used)
372	Standard Detail Drawing-Concrete Base Type 13 (Type 13 base no longer used)

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

ADDENDUM NO. 01

Project ID 2704-00-76

March 1, 2019

Special Provisions

5. Prosecution and Progress.

Replace paragraph six with the following:

Complete all pavement marking, signage and open all traffic lanes in all directions by November 15. During Winter shutdown all traffic lanes in all directions will be open to traffic. Winter Shutdown will commence with the completion of all the roadway grading and paving except for plantings and restoration in the fall of 2019. Do not resume work until April 15, 2020 unless approved by the engineer. Provide a start date in writing at least 14 days prior to the planned start of construction in 2020. Upon approval the engineer will issue the notice to proceed within 10 days of the approved start date.

Replace paragraph one under section titled **D Enhanced Coordination** *with the following:*

The project limits include numerous utilities that parallel the entire length of the project limits, along both Wisconn Valley Way and Braun Road. There may be multiple utility contractors working within the roadway construction area. Contractor is required to coordinate with all utility contractors to facilitate the roadway construction in a timely manner without delays. Braun Road east of the project will be under construction along with an expansive site development which will add trucks to the haul routes. The contract interim and final completion dates will not be extended due to utility installations or haul route delays due to Braun Road and the site development construction traffic. Ensure these elements are accounted for when determining the construction schedule.

11. Utilities

Add the following bullet after the 3rd bulleted paragraph under section titled **AT&T Wisconsin***:*

- An existing overhead communication line beginning beyond the westerly project limits and running easterly to a pole at Station 600+32, 33'LT and continues to a pole at Station 600+33, 101'RT where it turns and runs northerly to beyond the project limits. AT&T Wisconsin will remove this line prior to construction. The poles will remain in place. Remove the poles as shown in the plans.

Replace paragraph one under section titled **Mount Pleasant, Village of – Sanitary** *with the following:*

Prior to construction, the Village of Mount Pleasant will construct new sanitary sewer facilities beginning beyond the easterly project limits and running westerly to a manhole at Station 501+20, 130'RT where it turns and runs northerly and terminates at a manhole at Station 503+76, 140'RT. This line will remain in place.

Replace the 1st bullet under section titled **Racine Water Works Commission** (RWWC) *with the following:*

- A new water main beginning at Station 555+24, 94'LT and running northerly crossing Braun Road at Station 68BRW+55, and continuing northerly along a line 16' east of and parallel to the proposed westerly Wisconn Valley Way right of way, to beyond the project limits. Construction of the water main along Wisconn Valley Way is anticipated to begin May 1, 2019 and be completed August 31, 2019.

Replace the 3rd bullet under section titled **We Energies - Electric** *with the following:*

- An existing overhead line beginning beyond the westerly project limits and running easterly to a pole at Station 600+32, 33'LT and continues to a pole at Station 600+33, 101'RT where it turns and runs northerly to beyond the project limits. We Energies will remove this line prior to construction.

Replace the 1st bullet under section titled **We Energies - Gas** *with the following:*

- A new low-pressure gas line beginning beyond the southerly project limits and running northerly along a line 8'east of and parallel to the proposed westerly Wisconn Valley Way right of way, crossing Braun Road at Station 68BRW+47, and continuing northerly along said parallel line to beyond the northerly project limits. Construction of this low-pressure gas line is anticipated to begin June 2019 and be completed August 2019.

107. Concrete Base Monotube Type 9 & 10 Special Pole, Item SPV.0060.301.

A Description
This special provision describes constructing concrete bases for Monotube Type 9 & 10 Special Pole conform to standard spec 654, details shown in the plans.

B Materials
Materials shall be according to standard spec 654.

C Construction
Construction shall be according to standard spec 654.

D Measurement
The department will measure Concrete Bases Monotube Type 9 & 10 Special Pole at the contract unit price 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.0060.301	Concrete Base Monotube Type 9 & 10 Special Poles	Each

Payment is full compensation for providing concrete bases; for embedded conduit and electrical components; for bar steel reinforcement, if required; for excavating, backfilling, and disposing of surplus materials.

108. Install Poles Type 9S, Item SPV.0060.302.

A Description
This special provision describes installing state furnished materials conforming to standard spec 657, details shown in the plans, and as modified in this special provision.

B Materials
The department will furnish the monotube poles. Provide any other necessary material required to complete the installation in accordance with standard spec 657.2 and as the plans show.

C Construction
Install equipment in accordance to standard spec 657.3.

D Measurement
The department will measure Install [Equipment] at the contract unit price 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.0060.302	Install Poles Type 9S	Each

Payment for the Install Poles bid items is full compensation for installing department furnished poles and for providing grounding lugs, fittings, shims, hardware, and other required components the department does not furnish.

109. Remove Wood Poles, Item SPV.0195.001.

A Description
A.1 General
This special provision describes removing the entire wood poles from the ground, loading and hauling the removed wood pole to a licensed solid waste disposal facility.

A.2 Environmental Protection – Disposal of Wood Poles

Conduct construction activities in an environmentally sound manner, including the proper disposal of all demolition material that cannot be recycled.

Treated wood is a regulated solid waste per NR 500 of the Wisconsin Administrative Code. Waste wood poles generated by the project must be landfilled at a licensed disposal facility.

Contact Andrew Malsom (WisDOT) at 262-548-6705 or Andrew.Malsom@dot.wi.gov for questions regarding the disposal.

Management of Material Excavated During Highway Construction		
Classification	**Characterization of Material**	**Material Management**
1. Common Excavation (NR 500.08(2) Unregulated or Exempt Material)	– Native soil – Fill soils that have no obvious visual or olfactory contamination and may not have been analyzed for contaminants. – Clean unpainted or untreated wood, brick, concrete, cured asphalt, and trace amounts of glass.	Contractor-selected sites approved through Erosion Control Implementation Plan (ECIP) review process, or on-site reuse
2. Special Excavation (NR 500.08(4) Solid Waste Low Hazard Exemption)	– Soil with low levels of petroleum contamination or contaminant metals within the site fill plan criteria. – Trace amounts (<25% volume of the excavation equipment's bucket load) of foundry sand, cinders, and fly ash.	WisDOT selected site or on-site reuse with WDNR concurrence. Sites must meet the location criteria of 504.04 (3) (c) and (4) (a) to (f). Fill plans are also approved through ECIP review process.
3. Contaminated Soil and Fill Material	– Lead painted or treated wood – Petroleum contaminated soil – Significant amounts (>25% volume of the excavation equipment's bucket load) of foundry sand, cinders, or fly ash.	Contaminated material disposed at a WDNR-licensed solid waste disposal facility. Petroleum contaminated material shall be treated at a bioremediation facility (biopile) prior to disposal at the landfill. Direct disposal of contaminated material at landfills without such pre-treatment must be pre-authorized by the WisDOT.
4. Asbestos-containing Waste	Asbestos-containing material	Landfill at a WDNR–licensed solid waste landfill with approval to accept asbestos-containing material.
5. Hazardous Waste	RCRA Subtitle C (NR 600) contaminated media (hazardous waste)	Disposed or treatment under State's hazardous waste disposal contract with Veolia. Significant quantities should be evaluated for potential treatment to render non-hazardous to reduce disposal costs.
6. Potentially contaminated material	Potentially contaminated material with unusual visual, olfactory, or other characteristics	Temporary stockpile with appropriate environmental controls constructed per NR 718.05. Temporary stockpiling at solid waste landfill may be alternative with WDNR & Landfill's approvals.

B (Vacant)

C Construction
Utility wood poles currently erected, downed, or stacked in piles shall be removed in its entirety from the ground. No part of any wood pole shall remain in the ground or buried on-site. The wood shall be hauled to a licensed landfill disposal facility.

D Measurement
The department will measure the Remove Wood Poles bid item acceptably completed by the ton. The contractor shall provide a ticket from a licensed landfill disposal facility with a certified scale that will represent an accurate weight of the wood delivered to the landfill. Should the poles become moisturized during delivery, the engineer may use engineering judgement to determine the actual weight of a dry wood pole.

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

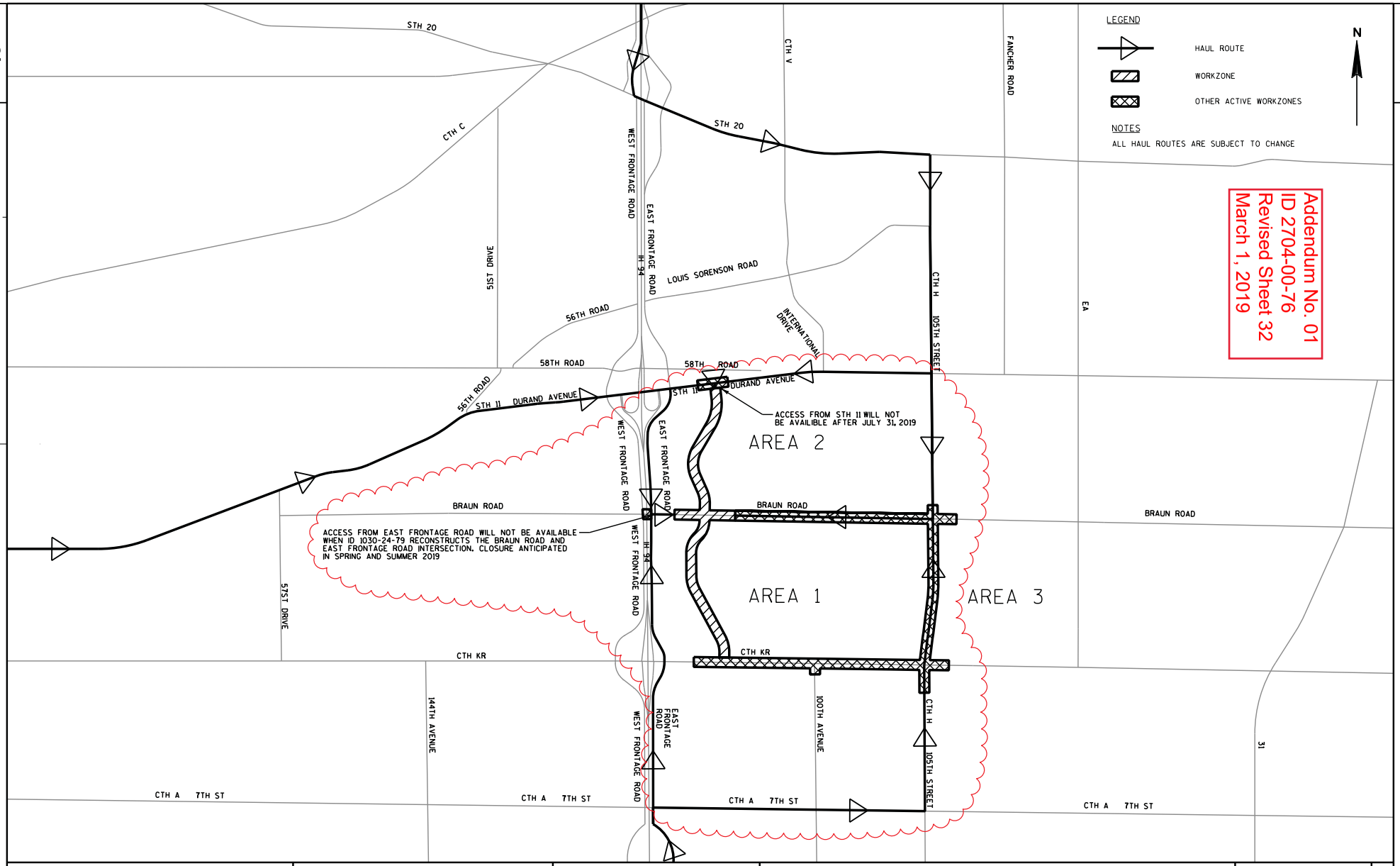
ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.001	Remove Wood Poles	TON

Payment is full compensation for removing and hauling wood poles to a licensed solid waste disposal facility. The contractor shall be compensated for the unit weight of the wood pole waste.

Schedule of Items
Attached, dated March 1, 2019, are the revised Schedule of Items Pages 10 – 16.

Plan Sheets
The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:
Revised: 32, 204, 229, 292-293, 297, 301-302, & 335
Added: 208A.
Deleted: 371 and 372

END OF ADDENDUM

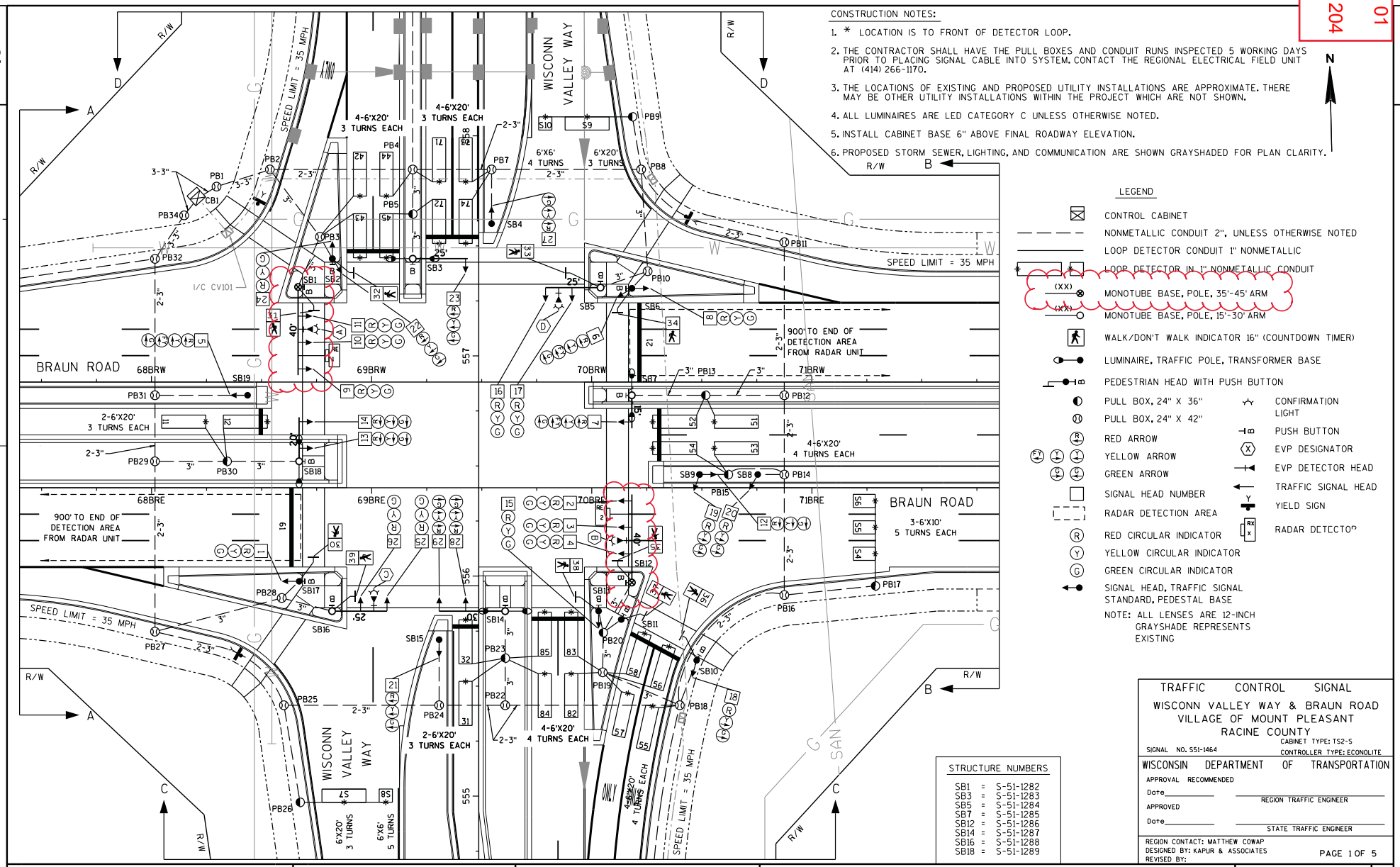


PROJECT NO: 2704-00-76	HWY: WISCONN VALLEY WAY	COUNTY: RACINE	CONSTRUCTION DETAILS: HAUL ROUTES	SHEET 32	E

FILE NAME : S:\DOT\DOT_SE\180045_Foxconn_Local_Roads\Design\DGN Files\WVW\Plansheets\27040076\021004_CD.DGN PLOT DATE : 2/22/2019 PLOT BY : wwoldk PLOT NAME : PLOT SCALE : 1:3200

WISDOT/CADDS SHEET 42

Addendum No. 01
ID 2704-00-76
Revised Sheet 204
March 1, 2019



CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE REGIONAL ELECTRICAL FIELD UNIT AT (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. ALL LUMINAIRES ARE LED CATEGORY C UNLESS OTHERWISE NOTED.
5. INSTALL CABINET BASE 6" ABOVE FINAL ROADWAY ELEVATION.
6. PROPOSED STORM SEWER, LIGHTING, AND COMMUNICATION ARE SHOWN GRAYSHADED FOR PLAN CLARITY.

N

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- (XX) MONOTUBE BASE, POLE, 35'-45' ARM
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- SIGNAL HEAD NUMBER
- RADAR DETECTION AREA
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- CONFIRMATION LIGHT
- PUSH BUTTON
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- TRAFFIC SIGNAL HEAD
- Y YIELD SIGN
- RADAR DETECTOR

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

STRUCTURE NUMBERS

SB1	= S-51-1282
SB3	= S-51-1283
SB5	= S-51-1284
SB7	= S-51-1285
SB12	= S-51-1286
SB14	= S-51-1287
SB16	= S-51-1288
SB18	= S-51-1289

TRAFFIC CONTROL SIGNAL

WISCONN VALLEY WAY & BRAUN ROAD
VILLAGE OF MOUNT PLEASANT
RACINE COUNTY

SIGNAL NO. 551-1464
CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date_____ REGION TRAFFIC ENGINEER
APPROVED
Date_____ STATE TRAFFIC ENGINEER

REGION CONTACT: MATTHEW COWAP
DESIGNED BY: KAPUR & ASSOCIATES
REVISED BY:

PAGE 1 OF 5

PROJECT NO: 2704-00-76	HWY: WISCONN VALLEY WAY	COUNTY: RACINE	TRAFFIC SIGNAL PLAN	SHEET 204	E

FILE NAME : S:\DOT\DOT_SE\180045_Foxconn_Local_Roads\Design\DGN Files\WVW\Plansheets\27040076\024001_SP.dgn
PLOT DATE : 2/4/2019
PLOT BY : showell
PLOT NAME :
PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THIER OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF THE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

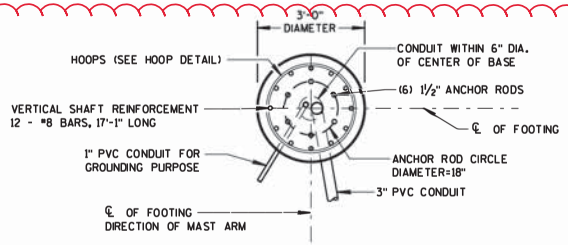
THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1-INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4-FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

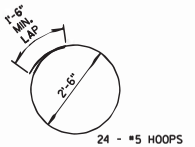
THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL WAY SHALL BE 24-INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36-INCHES, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

CONCRETE MASONRY ---------- fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 ------ fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATIONS --- fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36 ---------- fy=36,000 p.s.i.

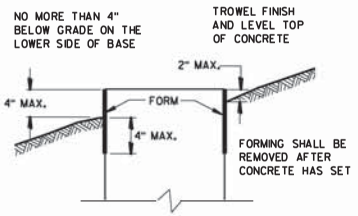


PLAN VIEW

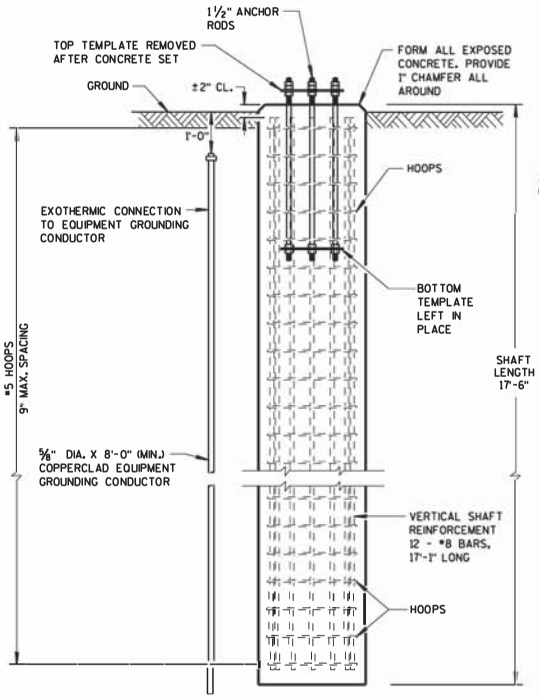


HOOP DETAIL

Addendum No. 01
ID 2704-00-76
Added Sheet 208A
March 1, 2019

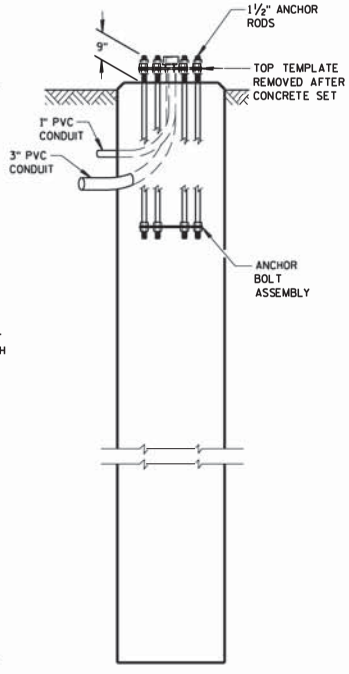


FORMING DETAIL



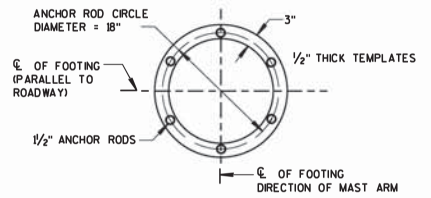
ELEVATION VIEW*

* CONDUITS ARE NOT SHOWN ON THIS VIEW FOR CLARITY

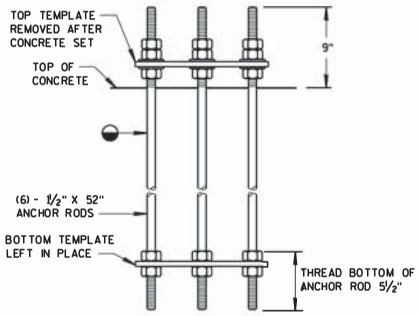


SIDE VIEW **

** HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE ANCHOR ASSEMBLY

◒ THREAD TOP 9" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5½" FOR 2 NUTS PER ANCHOR ROD. HOT-DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR RODS (ASTM A123) AND HOT-DIP NUTS AND WASHERS (ASTM A153). USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

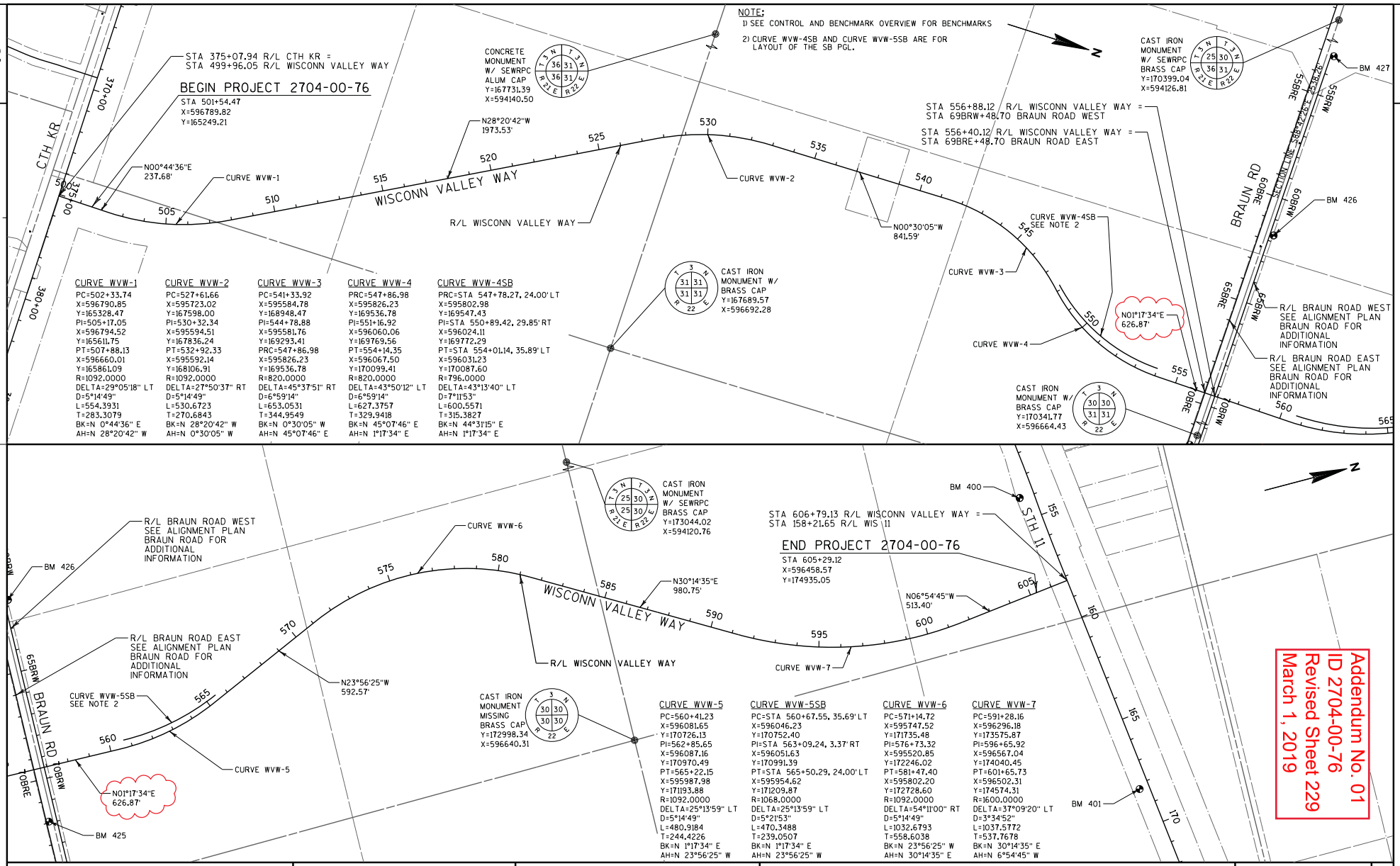
(FOR TYPE 9 & 10 SPECIAL POLES)

CONCRETE = 4.6 C.Y.
H.S. REINFORCEMENT = 779 LBS.

TO BE USED WHEN GROUND ELEVATION, AT BASE, EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

PROJECT NO:2704-00-76	HWY: WISCONN VALLEY WAY	COUNTY: RACINE	TYPE 9&10 SPECIAL TRAFFIC SIGNAL BASE DETAILS	SHEET 208A	E

FILE NAME : C:\Users\dotarc\Desktop\T9_T10_Special\T10 Special Base - Construction Detail 20181019.dgn
PLOT DATE : 26-NOV-2018 11:15
PLOT BY : dotarc
PLOT NAME :
PLOT SCALE : 1:3.47652
WISDOT/CADDS SHEET --



PROJECT NO: 2704-00-76	HWY: WISCONN VALLEY WAY	COUNTY: RACINE	ALIGNMENT PLAN	SHEET 229	E

FILE NAME : S:\DOT\DOT_SE\180045_Foxconn_Local_Roads\Design\DGN Files\WVW\Plansheets\27040076\027201_AD.dgn PLOT DATE : 2/25/2019 PLOT BY : wwoldk PLOT NAME : PLOT SCALE : 1:400

CONNECT DRAIN TILE

LOCATION	SPV.0060.013 CONNECT DRAIN TILE EA	608.0312* STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF
UNDISTRIBUTED	50	4,375
PROJECT 2704-00-76 TOTAL	50	4,375

*NOTE: ADDITIONAL QUANTITIES SHOWN ELSEWHERE

PAVEMENT CLEANUP PROJECT

LOCATION	SPV.0075.001 PAVEMENT CLEANUP PROJECT 2704-00-76 HR
PROJECT 2704-00-76	30
PROJECT 2704-00-76 TOTAL	30

UTILITY REMOVALS

ROADWAY	STATION	OFFSET	SPV.0195.001 REMOVE WOOD POLES TON
Wisconn Valley Way			
	600+32	33'LT	.5
	600+31	101'RT	.5
	600+92	116'RT	.5
	603+61	136'RT	.5
	605+30	158'RT	.5
	605+85	163'RT	.5
TOTALS			3.0

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March 1, 2019

PIPE UNDERDRAIN

STA	TO	STA	LOCATION	SPV.0090.002* PIPE UNDERDRAIN 6-INCH SPECIAL LF
501+54	-	555+10	WISCONN VALLEY WAY	8,230
558+00	-	604+25	WISCONN VALLEY WAY	7,130
			BRAUN ROAD	550
PROJECT 2704-00-76 TOTAL				15,910

*NOTE: ADDITIONAL QUANTITIES SHOWN ELSEWHERE

NOTE: CONNECT PIPE UNDERDRAIN TO CURBLINE INLETS

SURVEY PROJECT

LOCATION	SPV.0105.007 SURVEY PROJECT 2704-00-76 LS
PROJECT 2704-00-76	1
PROJECT 2704-00-76 TOTAL	1

REMOVAL AND DISPOSAL OF INVASIVE PLANT SPECIES

LOCATION	SPV.0170.001 REMOVAL AND DISPOSAL OF INVASIVE PLANT SPECIES STA
PROJECT 2704-00-76	5
PROJECT 2704-00-76 TOTAL	5

ALL ITEMS CATEGORY 1000 UNLESS OTHERWISE NOTED

WISCONN VALLEY WAY & BRAUN ROAD

ALL ITEMS ARE CATEGORY 3000 UNLESS OTHERWISE NOTED

3

3

SUMMARY OF STATE FURNISHED MATERIALS - FOR INFORMATION ONLY

QUANTITY	UNIT	DESCRIPTION
1	EACH	TRAFFIC SIGNAL CONTROLLER AND CABINET
4	EACH	EVP DETECTOR HEAD WITH CONFIRMATION BEACON (HEADS A, B, C, D)
2	EACH	RADAR DETECTOR UNIT - ADVANCE (RE1, RE2)
1	EACH	CELL MODEM
1	EACH	ETHERNET SWITCH
2	EACH	STATE FURNISHED POLES TYPE 9
4	EACH	STATE FURNISHED POLES TYPE 10
2	EACH	STATE FURNISHED POLES TYPE 9S
1	EACH	STATE FURNISHED MONOTUBE ARMS 15-FT
1	EACH	STATE FURNISHED MONOTUBE ARMS 20-FT
3	EACH	STATE FURNISHED MONOTUBE ARMS 25-FT
1	EACH	STATE FURNISHED MONOTUBE ARMS 30-FT
2	EACH	STATE FURNISHED MONOTUBE ARMS 40-FT
8	EACH	STATE FURNISHED LUMINAIRE ARMS STEEL 15-FT

Addendum No. 01
ID 2704-00-76
Revised Sheet 293
March 1, 2019

PROJECT NUMBER: 2704-00-76	HWY: WISCONN VALLEY WAY	COUNTY: RACINE	MISCELLANEOUS QUANTITIES	SHEET NO: 293	E

FILE NAME: S:\DOT\DOT_SE\180045_Foxconn_Local_Roads\Design\DGN Files\WVW\Reference Files\signals\WVW and Braun Quantities.ppt
PLOT DATE : 11/19/2018 4:18:22 PM PLOT BY : KAPUR & ASSOCIATES PLOT SCALE : 1:1

WISCONN VALLEY WAY & BRAUN ROAD

ALL ITEMS ARE CATEGORY 3000 UNLESS OTHERWISE NOTED

3

3

CONCRETE BASES

BASE NO.	STATION	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	SPV.0060.301 CONCRETE BASE MONOTUBE TYPE 9 & 10 SPECIAL POLE EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
CB1	68BRW+21.04	83.6' LT	--	--	--	1
SB1	68BRW+66.61	43.2' LT	--	--	1	--
SB2	68BRW+82.18	56.1' LT	1	--	--	--
SB3	557+44.18	30.0' LT	--	1	--	--
SB4	557+60.12	5.8' RT	1	--	--	--
SB5	70BRW+04.01	42.9' LT	--	1	--	--
SB6	70BRW+18.26	42.6' LT	1	--	--	--
SB7	70BRW+18.23	6.0' RT	--	1	--	--
SB8	70BRE+75.38	6.0' LT	1	--	--	--
SB9	70BRE+48.93	6.0' LT	1	--	--	--
SB10	70BRE+47.64	78.4' RT	1	--	--	--
SB11	70BRE+13.37	59.9' RT	1	--	--	--
SB12	70BRE+18.22	43.1' RT	--	--	1	--
SB13	555+84.08	54.5' RT	1	--	--	--
SB14	555+84.05	12.0' RT	--	1	--	--
SB15	555+71.07	18.0' LT	1	--	--	--
SB16	68BRE+81.98	56.1' RT	--	1	--	--
SB17	68BRE+67.04	42.5' RT	1	--	--	--
SB18	68BRE+67.08	12.0' LT	--	1	--	--
SB19	68BRW+43.68	6.0' RT	1	--	--	--
		PROJECT 2704-00-76 TOTALS	11	6	2	1

*** FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

Addendum No. 01
ID 2704-00-76
Revised Sheet 297
March 1, 2019

PROJECT NUMBER: 2704-00-76	HWY: WISCONN VALLEY WAY	COUNTY: RACINE	MISCELLANEOUS QUANTITIES	SHEET NO: 297	E

FILE NAME: S:\DOT\DOT_SE\180045_Foxconn_Local_Roads\Design\DGN Files\WVW\Reference Files\signals\WVW and Braun Quantities.ppt
PLOT DATE : 11/19/2018 4:18:22 PM PLOT BY : KAPUR & ASSOCIATES PLOT SCALE : 1:1

WISCONN VALLEY WAY & BRAUN ROAD

ALL ITEMS ARE CATEGORY 3000 UNLESS OTHERWISE NOTED

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CAST BASES, POLES, STANDARDS, MONOTUBE, PUSH BUTTONS, AND LUMINAIRES

SIGNAL BASE NO.	657.0100 PEDESTAL BASES EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	STATE FURNISHED POLES TYPE 9**** EACH	STATE FURNISHED POLES TYPE 10**** EACH	STATE FURNISHED POLES TYPE 9S**** EACH
SB1	--	--	--	--	--	--	1
SB2	1	1	--	--	--	--	--
SB3	--	--	--	--	--	1	--
SB4	1	1	--	--	--	--	--
SB5	--	--	--	--	1	--	--
SB6	1	--	1	--	--	--	--
SB7	--	--	--	--	--	1	--
SB8	1	1	--	--	--	--	--
SB9	1	1	--	--	--	--	--
SB10	1	1	--	--	--	--	--
SB11	1	--	--	1	--	--	--
SB12	--	--	--	--	--	--	1
SB13	1	1	--	--	--	--	--
SB14	--	--	--	--	--	1	--
SB15	1	1	--	--	--	--	--
SB16	--	--	--	--	1	--	--
SB17	1	1	--	--	--	--	--
SB18	--	--	--	--	--	1	--
SB19	1	--	1	--	--	--	--
PROJECT 2704-00-76 TOTALS	11	8	2	1	2	4	2

**** ITEM WILL BE PAID FOR UNDER SPV.0105.309 TRANSPORT AND INSTALL TRAFFIC SIGNAL, MONOTUBE, AND INTERSECTION LIGHTING MATERIALS

Addendum No. 01
ID 2704-00-76
Revised Sheet 301
March 1, 2019

PROJECT NUMBER: 2704-00-76	HWY: WISCONN VALLEY WAY	COUNTY: RACINE	MISCELLANEOUS QUANTITIES	SHEET NO: 301	E

FILE NAME: S:\DOT\DOT_SE\180045_Foxconn_Local_Roads\Design\DGN Files\WVW\Reference Files\signals\WVW and Braun Quantities.ppt
PLOT DATE : 11/19/2018 4:18:22 PM PLOT BY : KAPUR & ASSOCIATES PLOT SCALE : 1:1

WISCONN VALLEY WAY & BRAUN ROAD

ALL ITEMS ARE CATEGORY 3000 UNLESS OTHERWISE NOTED

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CAST BASES, POLES, STANDARDS, MONOTUBE, PUSH BUTTONS, AND LUMINAIRES (CONTINUED)

SIGNAL BASE NO.	STATE FURNISHED MONOTUBE ARMS 15-FT**** EACH	STATE FURNISHED MONOTUBE ARMS 20-FT**** EACH	STATE FURNISHED MONOTUBE ARMS 25-FT**** EACH	STATE FURNISHED MONOTUBE ARMS 30-FT**** EACH	STATE FURNISHED MONOTUBE ARMS 40-FT**** EACH	STATE FURNISHED LUMINAIRE ARMS STEEL 15-FT**** EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	659.1125 LUMINAIRES UTILITY LED C EACH	SPV.0060.302 INSTALL POLES TYPE 9S EACH
SB1	--	--	--	--	1	--	1	--	1
SB2	--	--	--	--	--	--	1	--	--
SB3	--	--	1	--	--	2	1	2	--
SB4	--	--	--	--	--	--	--	--	--
SB5	--	--	1	--	--	--	1	--	--
SB6	--	--	--	--	--	--	1	--	--
SB7	1	--	--	--	--	2	1	2	--
SB8	--	--	--	--	--	--	--	--	--
SB9	--	--	--	--	--	--	--	--	--
SB10	--	--	--	--	--	--	--	--	--
SB11	--	--	--	--	--	--	1	--	--
SB12	--	--	--	--	1	--	1	--	1
SB13	--	--	--	--	--	--	1	--	--
SB14	--	--	--	1	--	2	1	2	--
SB15	--	--	--	--	--	--	--	--	--
SB16	--	--	1	--	--	--	1	--	--
SB17	--	--	--	--	--	--	1	--	--
SB18	--	1	--	--	--	2	1	2	--
SB19	--	--	--	--	--	--	--	--	--
PROJECT 2704-00-76 TOTALS	1	1	3	1	2	8	13	8	2

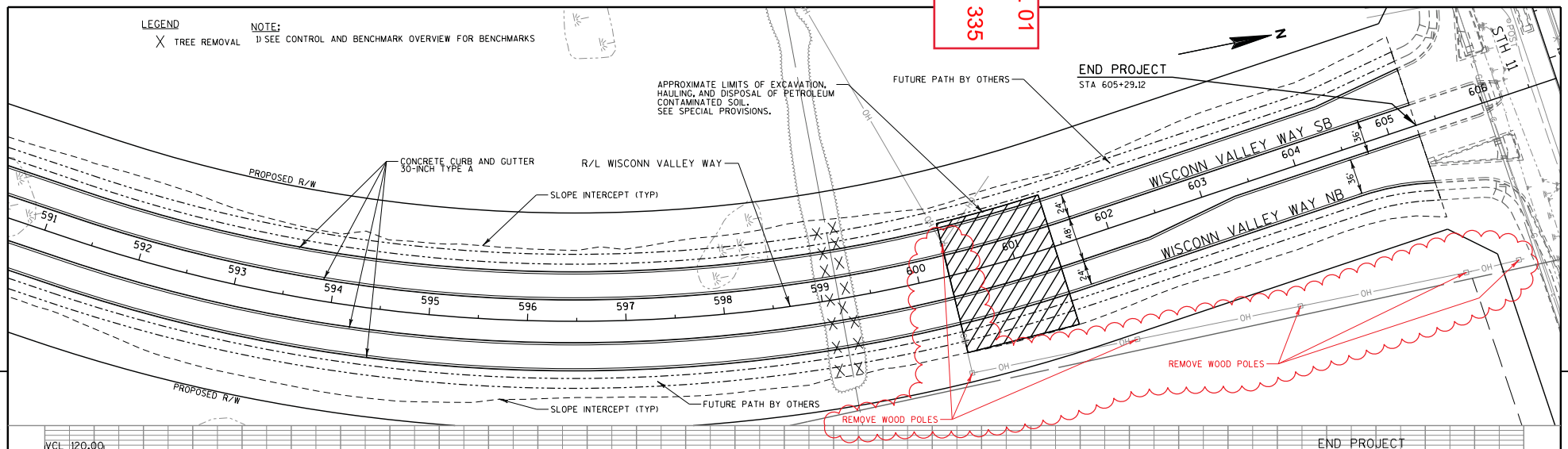
**** ITEM WILL BE PAID FOR UNDER SPV.0105.309 TRANSPORT AND INSTALL TRAFFIC SIGNAL, MONOTUBE, AND INTERSECTION LIGHTING MATERIALS

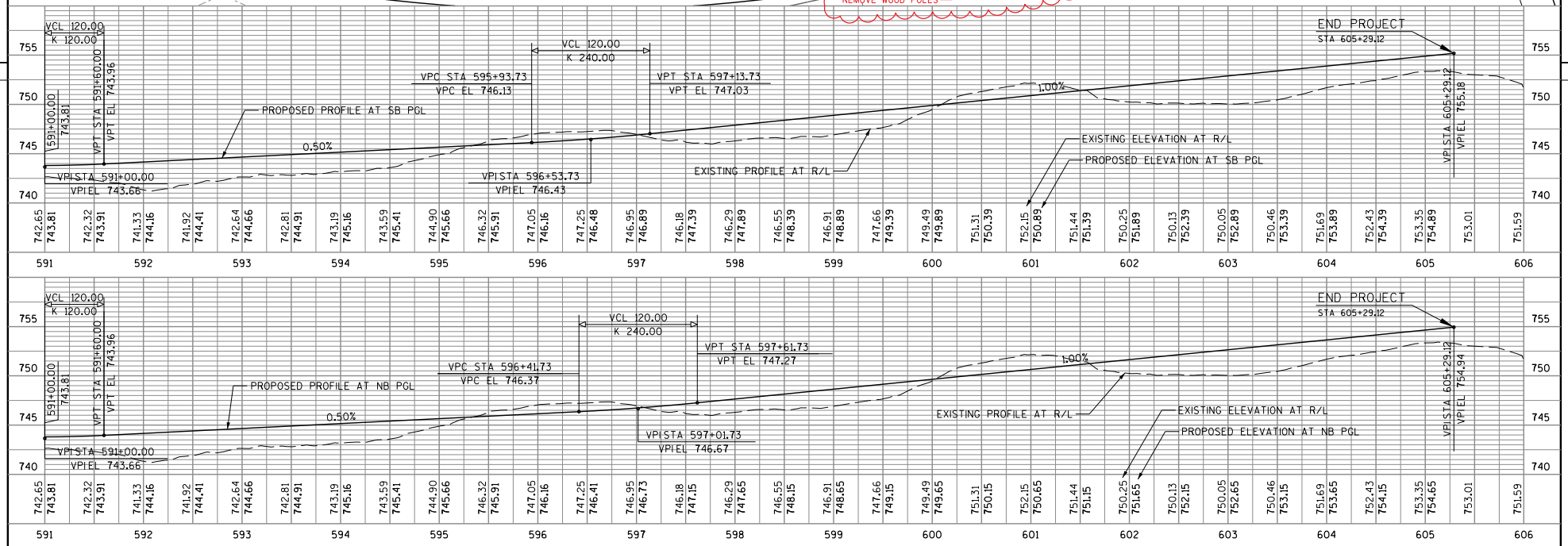
Addendum No. 01
ID 2704-00-76
Revised Sheet 302
March 1, 2019

PROJECT NUMBER: 2704-00-76	HWY: WISCONN VALLEY WAY	COUNTY: RACINE	MISCELLANEOUS QUANTITIES	SHEET NO: 302	E

FILE NAME: S:\DOT\DOT_SE\180045_Foxconn_Local_Roads\Design\DGN Files\WVW\Reference Files\signals\WVW and Braun Quantities.ppt
PLOT DATE : 11/19/2018 4:18:22 PM PLOT BY : KAPUR & ASSOCIATES PLOT SCALE : 1:1

Addendum No. 01
ID 2704-00-76
Revised Sheet 335
March 1, 2019





PROJECT NO: 2704-00-76	HWY: WISCONN VALLEY WAY	COUNTY: RACINE	PLAN AND PROFILE: WISCONN VALLEY WAY	SHEET 335 E

FILE NAME : S:\DOT\DOT_SE\180045_Foxconn_Local_Roads\Design\DGN Files\WVW\Plansheets\27040076\050107_PP.dgn
PLOT DATE : 2/22/2019
PLOT BY : wwoldk
PLOT NAME :
PLOT SCALE : 1:100
WISDOT/CADDS SHEET 45

Proposal ID: 20190312021 Project(s): 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0274	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	13,488.000 LF	_____.____	_____.____
0276	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	4,108.000 LF	_____.____	_____.____
0278	652.0800 Conduit Loop Detector	3,182.000 LF	_____.____	_____.____
0280	653.0135 Pull Boxes Steel 24x36-Inch	26.000 EACH	_____.____	_____.____
0282	653.0140 Pull Boxes Steel 24x42-Inch	22.000 EACH	_____.____	_____.____
0284	654.0101 Concrete Bases Type 1	11.000 EACH	_____.____	_____.____
0286	654.0105 Concrete Bases Type 5	53.000 EACH	_____.____	_____.____
0288	654.0110 Concrete Bases Type 10	6.000 EACH	_____.____	_____.____
0292	654.0217 Concrete Control Cabinet Bases Type 9 Special	1.000 EACH	_____.____	_____.____
0294	654.0230 Concrete Control Cabinet Bases Type L30	3.000 EACH	_____.____	_____.____
0296	655.0210 Cable Traffic Signal 3-14 AWG	1,666.000 LF	_____.____	_____.____
0298	655.0230 Cable Traffic Signal 5-14 AWG	996.000 LF	_____.____	_____.____
0300	655.0240 Cable Traffic Signal 7-14 AWG	4,261.000 LF	_____.____	_____.____
0302	655.0260 Cable Traffic Signal 12-14 AWG	3,567.000 LF	_____.____	_____.____
0304	655.0270 Cable Traffic Signal 15-14 AWG	512.000 LF	_____.____	_____.____
0306	655.0320 Cable Type UF 2-10 AWG Grounded	1,453.000 LF	_____.____	_____.____

Proposal ID: 20190312021 Project(s): 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0308	655.0510 Electrical Wire Traffic Signals 12 AWG	10,926.000 LF	_____.____	_____.____
0310	655.0515 Electrical Wire Traffic Signals 10 AWG	5,423.000 LF	_____.____	_____.____
0312	655.0610 Electrical Wire Lighting 12 AWG	1,152.000 LF	_____.____	_____.____
0314	655.0700 Loop Detector Lead In Cable	11,696.000 LF	_____.____	_____.____
0316	655.0800 Loop Detector Wire	12,094.000 LF	_____.____	_____.____
0318	655.0900 Traffic Signal EVP Detector Cable	1,666.000 LF	_____.____	_____.____
0320	656.0200 Electrical Service Meter Breaker Pedestal (location) 301. Braun Road & Wisconn Valley Way	LS	LUMP SUM	_____.____
0322	657.0100 Pedestal Bases	11.000 EACH	_____.____	_____.____
0324	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	53.000 EACH	_____.____	_____.____
0326	657.0420 Traffic Signal Standards Aluminum 13-FT	8.000 EACH	_____.____	_____.____
0328	657.0425 Traffic Signal Standards Aluminum 15-FT	2.000 EACH	_____.____	_____.____
0330	657.0430 Traffic Signal Standards Aluminum 10-FT	1.000 EACH	_____.____	_____.____
0332	658.0173 Traffic Signal Face 3S 12-Inch	26.000 EACH	_____.____	_____.____
0334	658.0174 Traffic Signal Face 4S 12-Inch	3.000 EACH	_____.____	_____.____
0336	658.0416 Pedestrian Signal Face 16-Inch	10.000 EACH	_____.____	_____.____
0338	658.0500 Pedestrian Push Buttons	13.000 EACH	_____.____	_____.____

Proposal ID: 20190312021 Project(s): 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0340	658.5069 Signal Mounting Hardware (location) 301. Braun Road & Wisconn Valley Way	LS	LUMP SUM	_____._____
0342	659.1125 Luminaires Utility LED C	8.000 EACH	_____._____	_____._____
0344	670.0100 Field System Integrator 001. FTMS	LS	LUMP SUM	_____._____
0346	670.0200 ITS Documentation 001. FTMS	LS	LUMP SUM	_____._____
0348	671.0122 Conduit HDPE 2-Duct 2-Inch	10,555.000 LF	_____._____	_____._____
0350	673.0105 Communication Vault Type 1	12.000 EACH	_____._____	_____._____
0352	673.0200 Tracer Wire Marker Posts	11.000 EACH	_____._____	_____._____
0354	677.0200 Install Camera Assembly	1.000 EACH	_____._____	_____._____
0356	678.0072 Install Fiber Optic Cable Outdoor Plant 72-CT	32,815.000 LF	_____._____	_____._____
0358	678.0300 Fiber Optic Splice	72.000 EACH	_____._____	_____._____
0360	678.0500 Communication System Testing	LS	LUMP SUM	_____._____
0362	715.0415 Incentive Strength Concrete Pavement	23,358.000 DOL	1.00000	23,358.00
0364	715.0710 Optimized Aggregate Gradation Incentive	73,578.000 DOL	1.00000	73,578.00
0366	740.0440 Incentive IRI Ride	19,625.000 DOL	1.00000	19,625.00
0368	SPV.0005 Special 001. Seed Bed Preparation	1.600 ACRE	_____._____	_____._____
0370	SPV.0005 Special 002. Seeding Special	1.600 ACRE	_____._____	_____._____

Proposal ID: 20190312021 Project(s): 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0372	SPV.0035 Special 001. EBS Excavation	31,723.000 CY	_____.____	_____.____
0374	SPV.0035 Special 002. EBS Backfill	31,723.000 CY	_____.____	_____.____
0376	SPV.0035 Special 003. Roadway Embankment	246,090.000 CY	_____.____	_____.____
0378	SPV.0060 Special 002. Temporary Stone Ditch Checks	20.000 EACH	_____.____	_____.____
0380	SPV.0060 Special 003. Sand Bags	150.000 EACH	_____.____	_____.____
0382	SPV.0060 Special 004. Temporary Sediment Traps	10.000 EACH	_____.____	_____.____
0384	SPV.0060 Special 005. Remove and Relocate Existing Apron Endwall 15-Inch	1.000 EACH	_____.____	_____.____
0386	SPV.0060 Special 006. Remove and Relocate Existing Apron Endwall 24-Inch	1.000 EACH	_____.____	_____.____
0388	SPV.0060 Special 008. Inlet Covers Beehive	9.000 EACH	_____.____	_____.____
0390	SPV.0060 Special 011. Manholes 9-FT	1.000 EACH	_____.____	_____.____
0392	SPV.0060 Special 012. Cover Plates Left In Place	2.000 EACH	_____.____	_____.____
0394	SPV.0060 Special 013. Connect Drain Tile	50.000 EACH	_____.____	_____.____
0396	SPV.0060 Special 020. Pond I Outlet Storm Sewer Structure	1.000 EACH	_____.____	_____.____
0398	SPV.0060 Special 021. Pond J Outlet Storm Sewer Structure	1.000 EACH	_____.____	_____.____
0400	SPV.0060 Special 022. Pond K Outlet Storm Sewer Structure	1.000 EACH	_____.____	_____.____

Proposal ID: 20190312021 Project(s): 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0402	SPV.0060 Special 023. Slip-In Check Valve for 12-Inch Inside Diameter Pipe	1.000 EACH	_____.____	_____.____
0404	SPV.0060 Special 024. Slip-In Check Valve for 24-Inch Inside Diameter Pipe	3.000 EACH	_____.____	_____.____
0406	SPV.0060 Special 025. Slip-In Check Valve for 30-Inch Inside Diameter Pipe	1.000 EACH	_____.____	_____.____
0408	SPV.0060 Special 026. Slip-In Check Valve for 15-Inch Inside Diameter Pipe	1.000 EACH	_____.____	_____.____
0410	SPV.0060 Special 050. Sign Support Special Mounting	3.000 EACH	_____.____	_____.____
0412	SPV.0060 Special 725. Bioretention Type A	5.000 EACH	_____.____	_____.____
0414	SPV.0060 Special 726. Bioretention Type B	4.000 EACH	_____.____	_____.____
0416	SPV.0075 Special 001. Pavement Cleanup Project 2704-00-76	30.000 HRS	_____.____	_____.____
0418	SPV.0085 Special 001. Seed Mix Special	350.000 LB	_____.____	_____.____
0420	SPV.0090 Special 001. Heavy Duty Silt Fence	2,885.000 LF	_____.____	_____.____
0422	SPV.0090 Special 002. Pipe Underdrain 6-Inch Special	16,010.000 LF	_____.____	_____.____
0424	SPV.0090 Special 003. Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 53x83-In	462.000 LF	_____.____	_____.____
0426	SPV.0090 Special 004. Marking Line Contrast Epoxy 4-Inch	4,738.000 LF	_____.____	_____.____
0428	SPV.0090 Special 005. Marking Line Contrast Epoxy 8-Inch	2,721.000 LF	_____.____	_____.____

Proposal ID: 20190312021 Project(s): 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0430	SPV.0090 Special 006. Concrete Curb and Gutter 6-Inch Sloped 48-Inch Type A	234.000 LF	_____.____	_____.____
0432	SPV.0105 Special 001. Surveillance and Care for Seeding Special	LS	LUMP SUM	_____.____
0434	SPV.0105 Special 007. Survey Project 2704-00-76	LS	LUMP SUM	_____.____
0436	SPV.0105 Special 306. Trns & Install State Furn Traf Sig Cabinet Braun Rd & WVW	LS	LUMP SUM	_____.____
0438	SPV.0105 Special 307. Trns & Install State Furn Radar Det Sys Braun Rd & WVW	LS	LUMP SUM	_____.____
0440	SPV.0105 Special 308. Trns & Install State Furn EVP Det Heads w/Conf Beacons Braun Rd & WVW	LS	LUMP SUM	_____.____
0442	SPV.0105 Special 309. Trans & Install Traf Sig, Monotube & Inter Lighting Mat Braun Rd & WVW	LS	LUMP SUM	_____.____
0444	SPV.0105 Special 310. Trns & Install St Furn FO Cable Pigtail 8-Ct, CTH KR & 100 Ave/Foxconn Drwy	LS	LUMP SUM	_____.____
0446	SPV.0105 Special 311. Trns & Install St Furn FO Cable Pigtail 8-Ct, CTH H & CTH KR	LS	LUMP SUM	_____.____
0448	SPV.0105 Special 312. Trns & Install St Furn FO Cable Pigtail 8-Ct, Braun Rd & Foxconn Drwy	LS	LUMP SUM	_____.____
0450	SPV.0105 Special 313. Trns & Install St Furn FO Cable Pigtail 8-Ct, CTH H & Braun Road	LS	LUMP SUM	_____.____
0452	SPV.0170 Special 001. Removal and Disposal of Invasive Plant Species	5.000 STA	_____.____	_____.____

Proposal ID: 20190312021 Project(s): 2704-00-76

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0454	SPV.0180 Special 001. Topsoil Special	199,655.000 SY	_____.____	_____.____
0456	SPV.0180 Special 002. Mulching Special	7,744.000 SY	_____.____	_____.____
0458	SPV.0180 Special 003. Topsoil Special for Prairie Seeding	7,744.000 SY	_____.____	_____.____
0460	SPV.0060 Special 301. Concrete Bases Monotube Type 9 & 10 Special Poles	2.000 EACH	_____.____	_____.____
0462	SPV.0060 Special 302. Installing Poles Type 9S	2.000 EACH	_____.____	_____.____
0464	SPV.0195 Special 001. Remove Wood Poles	3.000 TON	_____.____	_____.____
	Section: 0001		Total:	_____.____
			Total Bid:	_____.____

Wisconsin Department of Transportation

Division of Transportation Systems Development
Bureau of Project Development
4822 Madison Yards Way, 4th Floor South
Madison, WI 53705

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

March 5, 2019

NOTICE TO ALL CONTRACTORS:

Proposal #21: 2704-00-76
Wisconn Valley Way, V Mt Pleasant
CTH KR to STH 11
Local Street
Racine County

Letting of March 12, 2019

This is Addendum No. 02, which provides for the following:

Special Provisions:

Revised Special Provisions	
Article No.	Description
5	Prosecution and Progress

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

ADDENDUM NO. 02

Project ID 2704-00-76

March 5, 2019

Special Provisions

5. Prosecution and Progress.

Replace paragraph six with the following:

Complete all pavement marking, signage and open all traffic lanes in all directions by November 30, 2019. During Winter shutdown all traffic lanes in all directions will be open to traffic. Winter Shutdown will commence with the completion of all the roadway grading and paving except for plantings and restoration in the fall of 2019. Do not resume work until April 15, 2020 unless approved by the engineer. Provide a start date in writing at least 14 days prior to the planned start of construction in 2020. Upon approval the engineer will issue the notice to proceed within 10 days of the approved start date

END OF ADDENDUM