## **HIGHWAY WORK PROPOSAL**

Wisconsin Department of Transportation DT1502 01/2020 s.66.0901(7) Wis. Stats

Proposal Number: 016

COUNTY STATE PROJECT FEDERAL PROJECT DESCRIPTION HIGHWAY

Outagamie 1146-75-81 N/A STH 76 - New London; CTH Jj - CTH T/ STH 015

Givens Rd

# 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: \$75,000.00  Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: May 14, 2024 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code  SAMPLE
Contract Completion Time 55 Working Days	NOT FOR BIDDING PURPOSES
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 Depart	ment Use Only
Grading, Base, Concrete Pavement, Asphalt Pavement, Storm Sewer, Fencing, Signs, Salt Storage Facility.		
Notice of Award Da	ited	Date Guaranty Returned

# PLEASE ATTACH PROPOSAL GUARANTY HERE

## PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

## **BID PREPARATION**

## Preparing the Proposal Schedule of Items

#### A. General

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

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<sup>TM</sup> on-line bidding exchange at <a href="http://www.bidx.com/">http://www.bidx.com/</a> 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<sup>TM</sup> 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 department's 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:
  - 4. Have a properly executed annual bid bond on file with the department.
  - 5. 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 TM web site.
  - 2. Use Expedite<sup>TM</sup> software to enter a unit price for every item in the schedule of items.
  - 3. Submit the bid according to the requirements of Expedite<sup>TM</sup> software and the Bid Express<sup>TM</sup> web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid
  - 4. Submit the bid before the hour and date the Notice to Contractors designates
  - 5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.
- (3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

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

- (1) Download the latest schedule of items from the Wisconsin pages of the Bid Express 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<sup>TM</sup> software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express<sup>TM</sup> web site to assure that the schedule of items is prepared properly.
- (2) Staple an 8 1/2 by 11 inch printout of the Expedite □ □ 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 TM 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 TM generated schedule of items is not the same on each page.
  - 2. The check code printed on the printout of the Expedite TM 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.

#### **B 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.

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)		(Name of Surety) (Affix Seal)	
(Company Name)		(Signature of Attorney-in-Fact)	
(Signature and Title)			
NOTARY FOR PRINCIPAL		NOTARY FO	R SURETY
(Date)		(Dat	te)
State of Wisconsin )		State of Wisconsin	)
(County )	SS.		) ss. _County )
On the above date, this instrument was acknowledged named person(s).	d before me by the	On the above date, this instrument w named person(s).	as acknowledged before me by the
(Signature, Notary Public, State of Wisco	onsin)	(Signature, Notary Publi	ic, State of Wisconsin)
(Print or Type Name, Notary Public, State of V	Visconsin)	(Print or Type Name, Notary	Public, State of Wisconsin)
(Date Commission Expires)		(Date Commission Expires)	

Notary Seal Notary Seal

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

## **CERTIFICATE OF ANNUAL BID BOND**

DT1305 8/2003

Wisconsin Department of Transportation

(Date)

Time Period Valid (	From/To)
Name of Surety	
Name of Contractor	
Certificate Holder	Wisconsin Department of Transportation
•	that an annual bid bond issued by the above-named Surety is currently on file with the artment of Transportation.
	is issued as a matter of information and conveys no rights upon the certificate holder mend, extend or alter the coverage of the annual bid bond.
Cancellation:	Should the above policy be cancelled before the expiration date, the issuing surety will give thirty (30) days written notice to the certificate holder indicated above.

(Signature of Authorized Contractor Representative)

## 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

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

## Instructions for Certification

- 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.

<u>Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions</u>

- 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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# STSP'S Revised January 5, 2024 SPECIAL PROVISIONS

## 1. General.

Perform the work under this construction contract for Project 1146-75-81, STH 76 - New London, CTH JJ - CTH T/Givens Rd, STH 15, Outagamie 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, 2024 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 (20240105)

## 2. Scope of Work.

The work under this contract shall consist of asphaltic surface, concrete pavement, base aggregate dense, select crushed material, salt storage structure, storm sewer items, erosion control items, finishing items, 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. Waiving Bidder Prequalification.

Bidder prequalification is not required; however, prior to awarding a contract, the department may require the bidder to produce financial documentation similar to the prequalification statement (DT1621) and evidence that they have history of performing work of similar character in a satisfactory manner. The bidder must also have an Annual Bid Bond on file with the department.

## 4. Prosecution and Progress.

Begin work within 10 calendar days after the engineer issues a written notice to do so.

Provide the time frame for construction of the project within the 2024 construction season to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure that the time frame is consistent with the contract completion time. Upon approval, the engineer will issue the notice to proceed within 10 calendar days before the beginning of the approved time frame.

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

## Northern Long-eared Bat (Myotis septentrionalis)

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

Ensure all operators, employees, and subcontractors working in areas of known or presumed bat habitat are aware of environmental commitments and avoidance and minimization measures (AMMs) to protect both bats and their habitat.

Direct temporary lighting, if used, away from wooded areas during the bat active season April 1 to October 31, both dates inclusive.

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The department has contracted with others and will perform the following operations after October 31 and prior to April 1:

Cutting down and removing trees.

Contractor means and methods to remove additional trees will not be allowed. If it is determined that additional trees with a 3-inch or greater diameter at breast height (dbh) need to be removed beyond contractor means and methods, notify the engineer to coordinate with the WisDOT REC to determine if consultation with United States Fish and Wildlife Service (USFWS) is required. The contractor must be aware that the WisDOT REC and/or USFWS may not permit modifications.

## 5. Traffic.

Perform this work conforming to standard spec 643, and as the plans show, or as the engineer approves, except as follows.

Submit to engineer for approval a detailed traffic control plan for any changes to the proposed traffic control detail as the plans show. Submit this plan 10 days before the preconstruction conference.

The turning of traffic control devices when not in use to obscure the message will not be allowed under this contract.

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

Conduct operations in such a manner that causes the least interference and inconvenience to the free flow of vehicles on the roadways. This includes the following:

All construction vehicles and equipment entering or leaving live traffic lanes shall yield to through traffic.

Equip all vehicles and equipment entering or leaving the live traffic lanes with a hazard identification beam (flashing yellow signal) capable of being visible on a sunny day when viewed without the sun directly on or behind the device from a distance of 1000 feet. Activate the beam when merging into or exiting a live traffic lane.

Do not disturb, remove, or obliterate any traffic control signs, advisory signs, shoulder delineators or beam guard in place along the traveled roadways without the approval of the engineer. Immediately repair or replace any damage done to the above during the construction operations at contractor expense.

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

ner-643-065 (20190410)

## 6. Holiday and Special Event Work Restrictions.

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

- From noon Wednesday, July 3, 2024 to 6:00 AM Monday, July 8, 2024 for Independence Day;
- From noon Friday, August 30, 2024 to 6:00 AM Tuesday, September 3, 2024 for Labor Day.

stp-107-005 (20210113)

## 7. Utilities.

This contract comes under the provision of Administrative Rule Trans 220.

stp-107-065 (20080501)

The utility work plan includes additional detailed information regarding the location of known discontinued, relocated, or removed utility facilities. These can be requested during the bid preparation process or from the project engineer after the contract has been awarded and executed.

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

## **AT&T Wisconsin (communications)**

We Energies (electric)

## 8. Other Contracts.

The following contract is anticipated to be under construction within the time period of the contract.

## **Project 1146-75-73**

WIS 15 west segment from CTH T/Givens Road - US 45 with construction from November 2023 through late 2024; WIS 15 closed for the majority of 2024.

## Project 1146-75-80

WIS 15 from CTH J to CTH T/Givens Road; polymer overlay of WIS 15 bridges at Nash Street, CTH M, Black Otter Creek, and WCL RR with construction during summer of 2024.

Coordinate all operations with the contractors for these respective projects.

## 9. Railroad Insurance and Coordination - Fox Valley and Lake Superior Rail System, LLC.

## **A Description**

Comply with standard spec 107.17 for all work affecting Fox Valley and Lake Superior Rail System, LLC property and any existing tracks.

## A.1 Railroad Insurance Requirements

In addition to standard spec 107.26, provide railroad protective liability insurance coverage as specified in standard spec 107.17.3. Insurance is filed in the name of Fox Valley and Lake Superior Rail System.

Notify evidence of the required coverage and duration to Justin Mahr, Senior Manger Real Estate - Contracts; 315 W. 3<sup>rd</sup> Street, Pittsburg, KS 66762; Telephone (402) 651-8238; E-mail: justin.mahr@watco.com.

Also send a copy to the following: Jared Kinziger, NE Region Railroad Coordinator; 944 Vanderperren Way, Green Bay, WI 54304; Telephone (920) 492-7713; E-mail: <a href="mailto:jared.kinziger@dot.wi.gov">jared.kinziger@dot.wi.gov</a>.

Include the following information on the insurance document:

- Project ID: 1146-75-81
- Project Location: Town of Hortonia, Wisconsin
- Route Name: Givens Road, Outagamie County
- Crossing ID: 181852B
- Railroad Subdivision: New London
- Railroad Milepost: 135.57
- Work Performed on or within 50' of RR right-of-way: Building a salt shed sight development.

## A.2 Train Operation

Approximately 6 through freight trains operate weekly at up to 10 mph.

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

## **Construction Contact**

Roger Schaalma, Divisional Engineer, Fox Valley and Lake Superior Rail System, LLC; 1890 East Johnson Street, Madison, WI 53704; Telephone (608) 620-2044; E-mail <a href="mailto:rschaalma@watco.com">rschaalma@watco.com</a> for consultation on railroad requirements during construction.

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

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## **Flagging Contact**

Gary Westphal, Roadmaster, (414) 750-5676, <a href="mailto:gwestphal@watco.com">gwestphal@watco.com</a>. Reference the Crossing ID, Wisconsin Milepost and Subdivision found in A.1. Contractor must officially request a railroad flagger a minimum of 15 days prior to scheduled work. If the contractor fails to do so and is required to pay an Expedited Fee, the project will not reimburse the contractor for said fee.

#### **Cable Locate Contact**

In addition to contacting Diggers Hotline, contact the Flagging Contact above at least five working days before the locate is needed. Reference the Crossing ID, Wisconsin Milepost and Subdivision found in A.1.

Fox Valley and Lake Superior Rail System, LLC will only locate railroad owned facilities located in the railroad right-of-way. The railroad does not locate any other utilities.

## A.4 Work by Railroad

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

## A.5 Temporary Grade Crossing

If a temporary grade crossing is desired, submit a written request to the railroad representative named in A.3 at least 40 days prior to the time needed. Approval is subject to the discretion of the railroad. The department has made no arrangements for a temporary grade crossing.

stp-107-026 (20240105)

# 10. Information to Bidders, WPDES Transportation Construction General Permit (TCGP) for Storm Water Discharges.

The department has obtained permit coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities under this contract. Conform to all permit requirements for the project.

This permit is the Wisconsin Pollutant Discharge Elimination System, Transportation Construction General Permit, (WPDES Permit No. WI-S066796-2). The permit can be found at:

https://widnr.widen.net/s/s5mwp2gd7s/finalsignedwisdotcsgp

A certificate of permit coverage is available from the regional office by contacting William Bertrand at (920) 360-3124. Post the permit certificate in a conspicuous place at the construction site.

stp-107-056 (20230629)

## 11. Environmental Protection, Herptiles.

Herptiles may be present at or near the project site during construction. Any herptiles that are found in the active work zone by any project staff shall be removed and relocated outside of the active work zone.

## 12. Bioretention Basin.

#### **Construction Site Stabilization**

Prevent construction site runoff from disturbed areas from entering the bioretention basin. Divert runoff from pervious areas from the basin until the pervious areas have undergone final stabilization. Final stabilization is the condition achieved on pervious areas when uniform perennial vegetative cover has been established with a density of at least 70 percent.

## **Suitable Weather**

Suspend basin construction during periods of rainfall or snowmelt. Maintain suspension of basin construction if ponded water is present or if residual soil moisture contributes significantly to the potential for soil smearing, clumping or other forms of compaction.

## **Compaction Avoidance**

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Minimize compaction and smearing of the engineered soil beneath the floor and side slopes of the bioretention area, and compaction of the soils used for backfill in the soil planting bed. During site development, cordon off the area dedicated to the bioretention device to prevent access by equipment with narrow tracks or narrow tires, rubber tires with large lugs, or high-pressure tires. Acceptable equipment for constructing the bioretention device includes excavation hoes, light equipment with turf type tires, marsh equipment or wide-track loaders.

## **Compaction Remediation**

If compaction of the engineered soil occurs, refracture the soil to a depth of at least 12 inches. If smearing occurs, correct the smeared areas of the interface by raking or roto-tilling.

## 13. Asphaltic Surface, Item 465.0105.

Replace standard spec 465.2(1) with the following:

Under the Asphaltic Surface, Asphaltic Surface Detours, and Asphaltic Surface Patching bid items; submit a mixture design. Furnish asphaltic mixture meeting the requirements specified for a 3 MT or 4 MT mix under 460.2; except the engineer will not require the contractor to conform to the quality management program specified under 460.2.8. Use tack coat as required under 450.3.2.7.

## 14. Engineered Soils, Item SPV.0035.01.

## **A Description**

The work under this item consists of furnishing and installing engineered soils according to the requirements of standard spec 625 of the standard specifications, as shown on the plans and as hereinafter provided.

#### **B** Materials

(1) Provide soil consisting of a mixture of sand, compost, and topsoil. Design the mix to approximate the following percentages, by volume.

Engineered Soil Component Percentage Composition (By Volume)

Mineral (SiO<sub>2</sub>) Sand 40%

Topsoil 20% if loam texture

30% if sandy loam or loamy sand texture

Compost 30% - 40%

- (2) Provide sand meeting the gradation requirements of standard spec 501.2.5.3.4. Provide sand consisting of mineral sand that is at least 97% Si0<sub>2</sub>. Substitutions, such as calcium carbonated sand, dolomitic sand, manufactured sand or stone dust will not be allowed. Wash the sand to remove clay and silt particles, and well drain prior to mixing.
- (3) For topsoil, provide USDA classified sandy loam, loamy sand or loam texture. Verify the topsoil component textural class by a laboratory analysis or a professional acceptable to the jurisdiction having authority.
- (4) Provide compost meeting the requirements of Wisconsin Department of Natural Resources Specification S100, Compost.
- (5) Provide engineered soil mix free of rocks, stumps, roots, brush, or other material over 1 inch in diameter. Do not mix materials with the engineered soil that may be harmful to plant growth or prove a hindrance to planting or maintenance.
- (6) Provide engineered soil mix with a pH between 5.5 and 6.5 and with adequate nutrient content to meet plant growth requirements.

## **C** Construction

## Placement and Settling of Engineered Soil

(1) Prior to placement in the bioretention basin, premix the engineered soil and provide a moisture content low enough to prevent clumping and compaction during placement.

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- (2) Place the engineered soil in multiple lifts, each approximately 7 inches in depth.
- (3) Steps may be taken to induce mild settling of the engineered soil bed as needed to prepare a stable planting medium and to stabilize the ponding depth. Vibrating plate-style compactors will not be allowed to induce settling.

#### **D** Measurement

The department will measure Engineered Soils in volume by the cubic yard, 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 NUMBERDESCRIPTIONUNITSPV.0035.01Engineered SoilsCY

Payment is full compensation for furnishing and installing the soil; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

## 15. Salt Storage Facility, Item SPV.0060.01.

## **A Description**

The work under this item consists of furnishing and installing a complete salt storage shed structure and all associated items described herein. All items needed to construct the salt storage facility shall be included in the Salt Storage Facility bid item, unless otherwise noted herein. Complete this work according to the plans, this special provision, and the applicable sections of the standard spec. If there is a conflict in the requirements of this special provision and the standard spec, the more stringent standard shall apply.

#### **B** Materials

All materials shall meet the standard specifications and the material specifications included in Parts 3 and 4 of the specifications herein.

#### **C** Construction

Construct the salt storage facility according to building supplier's recommendations and the criteria included in Parts 3 and 4 of the specifications herein.

#### **D** Measurement

The department will measure Salt Storage Facility as a single complete unit of work, completed and accepted according to the contract.

## **E** Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.01Salt Storage FacilityEACH

Payment is full compensation for designing the building; for providing, constructing and erecting the foundations, walls, roof, and all other accessory items specified herein, including but not limited to, pipe bollards, doors, siding, roofing trim, lighting, electrical and other accessories; and construction staking for the structure; for obtaining necessary permits, for performing all required testing, for providing electrical service; and for furnishing manufacturer's warranties.

Site work including clearing, excavation, backfill, asphaltic pavement and base course (including asphalt pavement inside building), and other site related items will be paid for separately. See also, PART 2 - RELATED WORK.

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#### PART 1 - GENERAL

## 1.01 Description

Provide design and construction for a weather tight, timber structure, suitable for the bulk storage of salt or sand. The building design shall meet or exceed the performance criteria, dimensional criteria, and other requirements of this specification.

## 1.02 Quality Assurance

Provide materials designed for use in a corrosive environment. Contractor is responsible for design and selection of all products, components, accessories, and methods used in constructing the building according to the design criteria and specifications provided herein.

The minimum building code requirements for material quality, fabrication, and installation procedures shall be met or exceeded, for applicable methods employed in the building design.

## 1.03 Submittals

Furnish the following information as proof of conformity to design and performance criteria requirements of this specification. The information shall be stamped with the registration seal of an architect or a professional engineer, licensed in the state of Wisconsin and bearing the original stamp and signature of such architect or professional engineer.

- A. Furnish a complete set of properly certified design drawings, indicating in detail all features of the proposed building.
- B. Include the following information at a minimum in the building submittal:
  - 1. Complete design calculations for building and foundations.
  - 2. For prefabricated structures: original working drawings, or copies of complete fabrication and erection drawings, material lists, and detailed erection instructions.
  - 3. Foundations: detailed drawings for preparation and construction.
    - Product Data: For each type of building component including color selections for approval. Refer to Section 3.01.0 for specified colors.
    - Shop Drawings as follows (this list is a minimum listing and does not limit the shop drawings to be provided):
      - 1. Concrete foundations.
      - 2. Steel Reinforcement
      - 3. Foundations: detailed drawings for preparation and construction.
      - 4. Roofing and Siding
      - 5. Flashings and Trim
      - 6. Doors and Frames
      - 7. Electrical and Lighting
      - 8. Accessories
- E. Provide Operation and Maintenance Manuals for all equipment installed in the building including overhead doors and operators and electrical systems.
- F. Record Drawings: Provide as-built record drawings of the salt shed in both hard copy and electronic PDF format at completion of construction.

## 1.04 Code Compliance

Design and build the structure in conformance with all applicable codes. Consult the state of Wisconsin website for information on all adopted codes and other ordinances. The governing building code is the Wisconsin Commercial Building Code SPS 360-366,

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which adopted by reference the 2015 International Building Code and companion codes.

## 1.05 State Plan Approval

Building Plan approval from the Wisconsin Department of Safety and Professional Services (WDSPS) is required prior to commencing construction. Complete the Application for Review (Form SBD-118), submitting properly stamped and signed drawings, calculations, and any other required documentation to WDSPS for plan review. Instructions and submittal requirements are provided on the WDSPS website. Pay all fees associated with the WDSPS plan submittal and resubmittals as required by WDSPS. Contractor is responsible for the complete design and WDSPS approvals and associated fees.

#### PART 2 - RELATED WORK

This section identifies work that is not included in the Salt Storage Facility bid item and is paid separately as part of other contract bid items.

## 2.01 Earthwork and Foundation Excavation

Perform excavation for building footings according to the WisDOT standard specifications and recommendations in the geotechnical report available from the department. Note that soil shall be excavated to a depth of at least 12-inches below the footings and replaced with compacted granular material below the footing. After footing excavation, the department's Regional Soils engineer will review the site to determine if the subgrade is suitable for the intended loads. Allow the Regional Soils engineer two working days to perform the review.

## 2.02 Building Floor

Coordinate Hot Mix Asphalt pavement and base installation with the building construction.

## 2.03 Final Grading and Restoration

Perform all work related to final grading and site restoration according to the site plans and applicable specifications.

#### **PART 3 – DESIGN CRITERIA & PRODUCTS**

## 3.01 <u>Building Design and Performance Criteria</u>

## A. Manufacturer Qualifications

Manufacturer shall have at least 10 years of successful experience in the design and construction of salt storage buildings such as Wheeler, Inc., Bulk Storage, Inc., or equivalent manufacturer who can demonstrate at least five completed projects of similar nature to this one and is able to comply with the requirements of this special provision.

## B. <u>Dimensional Requirements for Building</u>

Width: 60-feet Length: 60-feet

Vertical Side Wall Height: 30 feet

## C. <u>Building Structural Requirements</u>

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Provide a rigid, self-supporting structure comprised of standard building framing components, or an approved building system of integrated structural components, complete with necessary foundations which are designed to securely and permanently support wall and roof construction. Design building to meet or exceed the following minimum structural design criteria:

- 1. Ground Snow Load: 40 PSF
- Wind Load: Ultimate Design Wind Speed = 105 mph (3-second gust), Exposure C
- 3. Net Allowable Soil Bearing Pressure: 3,000 PSF
- 4. Seismic Design Category: A
- D. <u>Building Products</u>: Meet the minimum required standards for the products listed below.
  - Concrete Provide concrete according to standard spec 501. Provide reinforcing steel according to standard spec 505. Minimum concrete compressive strength shall be as specified by the building supplier's designer.
  - 2. Wood and Structural Timber:
    - a. Comply with applicable American Wood Preserver's Association (AWPA) standards.
    - b. Treat all above-ground lumber exposed to weather, or directly in contact with salt, with a wood preservative. Wood shall be pressure treated according to AWPA UC4C and AASHTO Designation M 133. Wood preservative treatment shall be oil-based Copper Naphthenate treatment according to AWPA P-36.
    - c. Structural Lumber shall be Douglas Fir Larch, No. 1 or better.
    - d. As far as practical all boring, chamfering, framing, gaining, mortising, surfacing etc., shall be completed prior to treatment. If cut after treatment, coat cut surfaces with 3 coats of an approved treatment preservative.
    - e. All wood components with a nominal thickness of 2-inches or less shall have a moisture content not to exceed 19 percent when installed.
    - f. Kiln dry all lumber to a maximum moisture content of 19 percent before treatment or as required by the applicable AWPA standards.
  - 3. Metal Plates and Fasteners:
    - a. Design metal plates and fasteners used in the building (truss bearing plates, shear plates, truss gusset plates, joist hangers, nails, bolts, nuts, washers, screws, etc.) that are in direct contact with salt, or that are exposed to an atmosphere containing salt, to resist corrosion due to such contact or exposure.
    - b. Provide products meeting the following specific requirements (if used in the building):

Truss bearing plates, bolts, nuts, and washers and other hardware: stainless steel or hot dip galvanized to A153.

Truss gusset plates and tie-downs: hot-dip galvanized steel, epoxy-coated or coated with asphalt paint after installation.

Nails attached to treated lumber: galvanized

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## F. Interior Space

- 1. Provide unobstructed interior space. Provide the entire interior floor area free of columns or roof supports of any type.
- 2. Minimum Center Clearance: Provide a 30-foot clear height for the entire width and length of the structure.

## G. Building Walls

- 1. Provide walls designed for the following requirements:
  - a. Side walls shall be concrete or pressure treated wood complying with the previously listed standards. Sidewalls shall be vertical as shown on the plans without exterior diagonal bracing extending away from the building wall.
  - b. Design the side walls to resist the load from salt or sand piled to a contained height of 12 feet against the wall.
  - c. The salt and sand will further slope upwards and away from the wall toward a peak or ridge in the center of the building at an anticipated 32-degree angle of repose.
  - d. The resulting horizontal force created against the concrete wall is anticipated to be 0.72 times the weight of the sand and salt.
  - e. Design the walls to resist a salt and sand load of 100 pounds per cubic foot and to resist a horizontal impact load from a loader.
  - f. Design and construct the barrier wall to allow for easy replacement of damaged components by maintenance personnel without requiring the use of heavy equipment.

## H. Exterior Wall Finishes

- 1. Provide vertical metal siding.
- 2. Provide fascia trim and vented soffit trim to prevent entrance by birds and rodents. Seal all openings around the building to keep birds and pests out.

## J. Siding

- 1. Provide preformed metal siding system for walls including related flashings, trim, and accessories. Components shall be rated to withstand wind load caused by a 25 psf positive and negative wind pressure acting normal to plane of wall. Accommodate movement within system without damage to components or deterioration of seals. Provide nominal 2 mil PVDF coating on siding and trim with 20 year warranty against cracking, chipping, peeling and fading. Metal flashing and trim shall be fabricated from the same metal, gauge, and finish as the siding panels. Fastener heads shall be factory color-coated to match the exterior panels.
- 2. Install metal siding system on walls according to manufacturer's instructions. Fasten siding aligned, level, and plumb. Locate end laps and end joints over supports. Lap panel ends minimum 2 inches. Provide expansion joints as required. Seal and place gaskets to prevent weather penetration. Maintain neat appearance. Remove site cuttings from finish surfaces. Clean and wash prefinished surfaces with mild soap and water; rinse with clean water. Siding color shall be selected by department from manufacturer's standard color options.

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#### K. Doors

- 1. Overhead Coiling Door Provide one unobstructed rectangular entrance opening, nominal dimensions to be 28-feet high by 20-feet wide.
  - a. Provide an exterior mounted overhead coiling door with electric motor operation and all operating hardware, controls and supports.
  - Design door for 20 pounds per square foot minimum wind load.
     Supply and install all head and jamb framing and blocking as required by door manufacturer.
  - Construct door of 20 gauge steel slats galvanized according to ASTM A653.
  - d. Bottom Bar Provide bottom bar comprised of two galvanized steel angles bolted back to back with minimum 1/8 inch thickness.
  - e. Guides Provide guides consisting of three galvanized structural steel angles with minimum thickness of 3/16 inch. Provide full height PVC weather seals contacting both interior and exterior surface of the curtain to minimize air flow.
  - f. Counterbalance Provide counterbalance torsion springs housed in a steel pipe barrel supporting the curtain with a deflection limited to 0.03 inches per foot of width. Design counterbalance for a minimum of 20,000 cycles.
  - g. Enclosure Provide hood designed for exterior mount with minimum 24 gauge galvanized steel finished to match door. Provide internal baffle to inhibit air infiltration.
  - h. Electric Door Operator Provide 2 H.P. to 3 H.P., 240-volt, three phase heavy duty motor with instant reverse ratchet and automatic reset thermal overload. Motor shall be sized by door supplier based on size and weight of door. Motor shall be totally enclosed nonventilated or totally enclosed fan-cooled type. Provide operator with a brake that is spring-set and solenoid released and able to stop and hold curtain in any position. Provide PVC pushbutton control station (open/close/stop) rated NEMA 4X and radio transmitter/receiver unit with remote controller. Provide electric sensing edge to stop and reverse the door upon contacting an object while closing. Control system shall use a heavy-duty reversing contactor, electrically and mechanically interlocked. System shall accommodate connection of sensing edge and control stations. Electrical controls and devices shall be rated for corrosive environment. All devices and controls shall be provided by door manufacturer and be powered from control panel transformer provided with the unit. Door system shall include a release from the operator to allow manual operation in the event of a power outage or operator failure.
  - Finishes Provide UV-resistant powder coated finish on curtain and hood in color selected by department from manufacturer's standard color options. Provide factory applied rust inhibitive primer compatible with field paint to all components not powder coated. Finish paint all components not powder coated per section 09 91 00 of PART 4 - TECHNICAL SPECIFICATIONS.
  - j. Installation Provide all required casing materials. Install door according to manufacturer's instructions and standards. Upon completion of installation, adjust operating controls, and lubricate door according to manufacturer's recommendations.

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- 2. Fiberglass Service Door (salt shed) Provide 3'-0" x 7'-0" fiberglass door according to the following specifications. Color shall be selected by department from the manufacturer's standard color options.
  - Materials Construct door from corrosion-resistant resign with light-stabilizing additives and a minimum glass fiber to resin ratio of 40 percent. Anchor door frame with stainless steel anchors and fasteners.
  - b. Construction Minimum door thickness shall be 1 3/4 inches. Construct with polyurethane foam core and FRP face sheets molded in one continuous piece. Provide minimum 15 mil gelcoated surface. Provide 1 1/2 inch square stiles and rails from pultruded fiberglass tubes. Provide polymer blocking for all hardware reinforcing.
  - c. Frame Provide one-piece pultruded FRP frame with minimum 1/4-inch wall thickness. Provide jamb to head joints mitered and reinforced with FRP clips and stainless steel fasteners. Provide 15 mil gel coat finish to match door.
  - d. Frame Profile 5 3/4 inches deep, 2 inch wide face, with 5/8 inch high stop. Provide 4-inch head frame.
  - e. Hardware Provide mortises and reinforced polymer blocking for all hardware. Outagamie County Highway Department will provide a Schlage CO-100 keypad lockset for installation by contractor.
  - f. Hinges Provide stainless steel Stanley FBB 191, Hager BB 1191, or equal butt hinges with full mortise, ball bearing, nonferrous, nonrising loose pin and flat bottom tip. Provide three hinges per door.
  - g. Provide stainless steel kickplates and weather stripping. Kick plates shall be Rockwood, or equal, 6 inches high. Kick plate width shall be 2 inches less than door width. Doors shall be weatherstripped with Reese DS75, National Guard Products, Inc. 156, or equal, weatherstripping. Provide Reese 323C, Pemko 315AN, or equal, sweeps; and Reese S425A, Pemko 171A, or equal, thresholds.

## L. Pipe Bollards

Furnish and install pipe bollards at locations shown on plans, minimum 6 inches in diameter and 8 feet in length, consisting of Schedule 80 galvanized steel structural pipe, filled with concrete. Furnish concrete within the pipe bollard according to standard spec 501. Form concrete crown at top of bollard. Embed pipes in concrete footings, and paint with a 3-coat epoxy paint system (primer plus two finish coats). Paint the entire length of the pipe including buried portion.

## M. Roofing System (General)

- 1. Type: Prefabricated or site-built, complete with all necessary accessories, fastening devices, trim, and flashings.
- 2. Drainage: positive slope; no standing water.
- 3. Strength: comply with structural criteria specified in Section 3.01.C.
- 4. Wind Resistance: 60 psf (uplift).
- 5. Compatibility: all materials to be physically and chemically compatible with each other and with adjacent building components.

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#### 6. Products:

- a. Metal Roofing 29 gauge (or heavier) galvanized coated steel panels, with color matched fasteners, carrying a manufacturer's warranty of at least 30 years for labor and materials. Roofing color to be selected by department from manufacturer's standard color options. Acceptable products are GrandRib 3 Plus by Fabral with Enduracote finish, Stormproof by MBCI with Signature 200 paint system, Max Rib by McElroy with siliconized polyester paint system, or equivalent.
- b. Roofing Underlayment Roofing base shall be 30-pound synthetic underlayment such as Titanium, GAF, or equivalent underlayment product as recommended by metal roofing manufacturer.
- c. Sheathing APA rated, minimum 5/8-inch thick nominal, CDX plywood roof sheathing. Metal roofing attached directly to trusses or roof purlins will not be accepted.
- d. Sheathing Clips Provide nylon H-Clips between roof sheathing.
- e. Trim Provide metal rake trim at all edges and slope changes.
- f. Roof Ridge Vents Provide suitable openings located at or near the highest point of the roof to provide a minimum ratio of 1 square inch of free air area for each 55 square feet of building floor area. Color to match adjacent roofing materials.

## N. Fire Extinguishers

Provide dry-chemical-type, multi-purpose 10-pound-capacity fire extinguishers at locations shown on plans. Fire extinguishers shall be UL-approved for Class A, Class B, and Class C fires. Provide units conforming to NFPA 10 requirements for portable fire extinguishers. Install according to manufacturer's instructions. Place extinguishers in brackets mounted so the handle is at 48 inches above the finished floor.

## O. Finish Color Selections

Finish colors for the building components shall be as follows:

Steel Siding: Surrey Beige Metal Roofing: Evergreen Trim and Fascia: Evergreen

Soffit: Surrey Beige

Overhead Door and Entry Door: Light Stone (select closest available match to beige siding color)

#### 3.02 Installation and Erection

- A. Provide all required foundations and supports at the required elevations on properly prepared subgrade, as required for the erection of the building.
- B. Provide foundation size and depth as required to resist frost action.
- C. Provide the complete building and required appurtenances conforming to the performance requirements of these specifications.

## 3.03 Electrical

Provide electrical work according to PART 4 - TECHNICAL SPECIFICATIONS.

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## **PART 4 – TECHNICAL SPECIFICATIONS**

Technical specifications that apply to the Salt Storage Facility item include:

**DIVISION 07 - THERMAL AND MOISTURE PROTECTION** 

Section 07 90 00 Caulking and Sealants

**DIVISION 09 - FINISHES** 

Section 09 91 00 Painting

**DIVISION 26 - ELECTRICAL** 

Section 26 05 19 Wire

Section 26 05 26 Secondary Grounding

Section 26 05 29 Supporting Devices

Section 26 05 33 Conduit

Section 26 05 35 Boxes

Section 26 05 53 Electrical Identification

Section 26 21 00 Electrical Service System

Section 26 24 16 Panelboards

Section 26 27 26 Wiring Devices

Section 26 27 28 Disconnect Switches

Section 26 43 13 Surge Protective Devices (SPD)

Section 26 51 13 Lighting

## **DIVISION 7 - THERMAL AND MOISTURE PROTECTION**

# SECTION 07 90 00 CAULKING AND SEALANTS

## **PART 1-GENERAL**

- 1.01 SUMMARY
  - Work Included: Caulking and sealants on the project, including primers and backer rod material.
- 1.02 SUBMITTALS
  - A. Submit copies of manufacturer warranty.
- 1.03 WARRANTY
  - A. Caulked joints shall be weather tight and guaranteed watertight by installer for 2 years from installation.
  - B. Provide manufacturer's 5-year product warranty.

#### PART 2-PRODUCTS

- 2.01 CAULK-GENERAL
  - Caulk for applications in all locations shall be a one-part polyurethane sealant.

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- B. Acceptable products include the following, or equal:
  - 1. Masterseal NP1 by BASF Construction Chemicals, LLC.
  - 2. Vulkem 116 by Tremco, Inc. (exterior applications only).
  - 3. Dymonic 100 by Tremco, Inc.

## 2.02 ACCESSORIES

- A. Backer rod shall be flexible, closed-cell polyethylene rod stock sized to be under at least 25% compression when positioned in the joint. In shallow joints and where backer rod is not used, polyethylene bond breaker tape shall be used. It is essential that the caulk bond to the side of the joint but not to the base of the joint.
- B. Primer(s) shall be used where required by the manufacturer for the specific product(s) used and the specific application(s) intended. Specific product(s) shall be as recommended by the manufacturer.
- C. Cleaning fluid shall be methyl ethyl ketone (MEK), methyl isopropyl ketone (MIK), or similar solvent material which will not etch or mar metal finishes and shall be the product of a nationally recognized manufacturer, of type expressly recommended for use with the caulking or sealant compound used.

#### PART 3-EXECUTION

#### 3.01 INSTALLATION

- A. Seal completely all joints around entire perimeter of all openings in all exterior walls (inside and outside faces), including joints at all exterior doors, sills, and elsewhere as noted on the drawings and as necessary to seal all open joints in the building in a complete manner. Joints in exterior walls shall be caulked in a completely weather tight manner. Joints between interior walls and concrete ceilings and other interior joints shall be caulked as indicated on the drawings. Caulking not specified in other sections shall be performed under this heading.
- B. All caulking shall be done according to manufacturer's specifications. Allow minimum 28-day curing period for concrete, grout, or mortar prior to caulking unless requested otherwise. Caulking work shall be done before the final coat of paint is applied except at moving joints which shall be finish painted before caulking or caulking shall be protected during painting. All caulking shall occur only when the temperature is above 40°F.
- C. Joints shall be thoroughly cleaned and primed before caulking according to manufacturer's instructions. Unless otherwise shown, joints shall be square in cross section 1/2-inch by 1/2-inch and shall comply with manufacturer's joint width/depth ratio limitations.
- D. Backer rod shall be used in all openings 3/4 inches or more in depth and shall be tightly packed to completely fill the space to 1/2-inch back of face. The 1/2-inch shall then be filled with caulking compound.
- E. Caulking shall be done by hand gun. Compound shall be driven into joint grooves with sufficient pressure to force out all air and fill joint grooves solidly. Caulking where exposed shall be free of wrinkles and shall be uniformly smooth.
- F. At completion of caulking, clean off all excess material from adjoining surfaces and material. Entire installation shall be left in a perfect appearing weather tight condition.

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## SECTION 09 91 00 PAINTING

## **PART 1-GENERAL**

#### 1.01 SUMMARY

A. Work Included: Surface preparation and application of paints and coatings.

## 1.02 SUBMITTALS

- A. Shop primer proposed for use shall be submitted with all material and equipment submittals. All shop primers shall be of the same generic type and quality as those specified herein.
- B. Submit two copies of manufacturer's Material Safety Data Sheets (MSDS) for each type of paint with each shop drawing submittal. MSDS sheets shall be posted at the construction site at all times painting is in progress.
- C. Substitution submittals shall include performance test data, as certified by a qualified testing laboratory, for the ASTM tests specified in this Section.

## 1.03 DELIVERY, STORAGE, AND HANDLING

- A. Materials shall be delivered to the site in original containers with labels intact and seals unbroken.
- B. Drop cloths shall be used in all areas where painting is done to fully protect other surfaces.
- C. Oily rags and waste must be removed from the building each night or kept in an appropriate metal container.

## 1.04 ENVIRONMENTAL REQUIREMENTS

- A. Contractor shall dry-heat, dehumidify, and ventilate to obtain painting conditions recommended by the paint manufacturer during surface preparation, application, and cure.
- B. Relative humidity conditions as specified by the paint manufacturer's data sheet shall be adhered to. This includes times in which supplemental heat is used. Supplemental heat shall be indirect-fired hot air furnaces or electric heat. Open-flame heaters shall not be used.
- C. No unprotected, unheated exterior painting shall be undertaken when damp weather appears probable, nor when the temperature of the substrate is below 55°F, unless approval in writing is received from the paint manufacturer.

#### 1.05 COLOR SELECTIONS

- A. Provide color charts for all coatings being used on the project. Provide draw down samples of colors provided on the drawings for department's final approval.
- B. Provide a summary sheet at the completion of the project listing the finish paint products used and the manufacturer's color identification for each item painted. This summary sheet should be submitted to engineer for review.

#### **PART 2-PRODUCTS**

## 2.01 ACCEPTABLE MANUFACTURERS

A. All materials required for painting shall be types and quality as manufactured by Tnemec Company, Inc., Sherwin Williams Company, International Devoe, Carboline, or equal, unless noted otherwise in the schedule.

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- B. Where thinning is necessary, only the products of the manufacturer furnishing the paint will be allowed. All such thinning shall be done strictly according to the manufacturer's instructions.
- C. Paint and paint products of Tnemec Company and Sherwin Williams, listed in the following specifications, are set up as standard of quality.

## **PART 3-EXECUTION**

#### 3.01 SURFACE PREPARATION

#### A. General:

- 1. All surfaces to be painted shall be prepared as specified herein and by the manufacturer's published data sheet and label directions. The objective shall be to obtain a uniform, clean, and dry surface.
- 2. No field painting shall be done before the prepared surfaces are observed by engineer. Surfaces painted without such observation shall be abrasive-blast-cleaned and repainted.

#### B. Ferrous Metal:

- 1. All ferrous metal to be primed in the shop shall have all rust, dust, and mill scale, as well as all other foreign substances, removed by abrasive blasting. Cleaned metal shall be primed or pretreated immediately after cleaning to prevent new rusting.
- 2. All ferrous metals not primed in the shop shall be abrasive-blasted in the field prior to application of the primer, pretreatment, or paint.
- 3. Abrasive blasting of metals in the shop shall be according to SSPC-SP6 Commercial Blast Cleaning.
- Solvent cleaning according to SSPC-SP1 shall precede all abrasive-blasting operations.
- 5. Prior to finish coating, all primed areas that are damaged shall be cleaned and spot-primed.
- C. Galvanized: Where galvanized items are not submerged or buried, they shall be cleaned with nonhydrocarbon solvent cleaner (such as Clean N Etch, or equal) according to SSPC-SP1 and shall be abrasive-blasted according to SSPC-SP16 Brush-Off Blast Cleaning.
- Wood: Wood surfaces shall be thoroughly cleaned and free of all foreign matter.

## 3.02 APPLICATION

- A. All materials shall be used as specified by the manufacturer's published data sheets and label directions.
- B. No paint shall be applied on a wet or damp surface and in no case until the preceding coat is dry and hard. Each coat shall be allowed to dry according to manufacturer's data sheets before the next coat is applied.
- C. Drying time shall be construed to mean "under normal conditions." Where conditions are other than normal because of the weather or because painting must be done in confined spaces, other drying times will be necessary.
- D. Additional coats of paint shall not be applied, nor shall units be returned to service until paints are thoroughly dry and cured.
- E. Steel that will be inaccessible in the completed work shall receive the final coat before enclosure.

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- F. Paint shall be applied to provide an opaque, smooth surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, or other surface imperfections will not be acceptable. Tops and bottoms of walls and areas that are "cut-in" by brush prior to rolling shall have a uniform appearance in comparison with adjoining surfaces.
- G. Crevices and other hard-to-apply areas shall be back-rolled/back-brushed in conjunction with application of the first field coat of primer or intermediate coat

#### 3.03 FIELD QUALITY CONTROL

A. Examination of work on the site by the manufacturer's representative shall be performed when requested by engineer.

## 3.04 CLEANING

 All stains and marks shall be removed from all surfaces upon completion of the work.

## 3.05 SCHEDULE

#### A. General:

- 1. At the completion of the project, all painted surfaces which have been damaged shall be repainted or touched-up.
- 2. See the drawings for an additional reference for areas to be painted.
- 3. Products listed first are Tnemec and second are Sherwin Williams.

#### B. New Work:

1. All new work done by all trades shall be painted by contractor according to the following schedule and according to paint manufacturer's recommendation. It is the intent of these specifications that all non-galvanized ferrous metal items scheduled for painting be shop-primed. If items are not shop-coated, surfaces shall be prepared and painted in the field as specified. If any items of new construction are not listed, contractor shall request paint system from engineer, and the items shall be painted as part of this Contract without additional cost.

## 2. Steel:

- a. One shop coat of N69-1255 Hi-Build Epoxoline, Macropoxy 646 Beige as primer.
- b. Touch-up primer prior to finish coat, and either:
  - (1) Two coats of N69 Hi-Build Epoxoline II, Macropoxy 646 for interior surfaces, or
  - (2) One coat of N69 Hi-Build Epoxoline II, Macropoxy 646; and one coat of 1074 Endura-Shield, Acrolon 218HS for exterior surfaces.
  - (3) First field coat shall be applied prior to installation to surfaces inaccessible after installation including back sides of door frames.

## C. Coverage:

 Dry mil thickness shall conform to those specified. Mil test measurement shall conform to SSPC Steel Structures Painting Manual. Dry Film Thickness (DFT) shall be verified according to SSPC-PA2.

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- The coatings listed will provide the mil thickness given when applied at the coverages listed. Upon the request of engineer, such surfaces shall be checked by the painter with a calibrated mil thickness gauge and any deficiencies found in the film shall be remedied by additional coat(s) at the expense of contractor.
- On porous surfaces, it shall be the painter's responsibility to achieve a
  protective and decorative pinhole-free finish either by decreasing the
  coverage rate or by applying additional coats of paint.
- 4. Coverages reflect manufacturer's recommendations using spray application techniques. Where brushing or rolling is specified or performed at the discretion of the painter, one additional coat, minimum, will be required to achieve total DFT thickness as specified and recommended by the manufacturer.
- D. Colors: Colors shall be selected by department to match factory-finished items.

## **DIVISION 26 - ELECTRICAL**

#### **SECTION 26 05 19**

#### **WIRE**

- A. All power wiring shall be stranded copper, type XHHW-2, no smaller than 12 AWG unless otherwise noted. All control wiring shall be type XHHW-2, no smaller than 14 AWG.
- B. Provide crimp type UL or ETL listed terminations for 6 AWG and smaller stranded conductor connections to electrical devices and equipment such as receptacles, switches, and terminal strips.
- C. Provide insulated, silicone-filled spring wire connectors with plastic caps for 8 AWG conductors or smaller. Connectors shall be silicon-filled safety connectors.
- D. Spring wire connectors shall only be allowed in junction, outlet, or switch boxes. Equipment wireways (e.g. panelboards, disconnects, etc.) shall not have any spring-wire connectors installed.
- E. All feeder cable connections to motor leads up to 600 volts shall be insulated and sealed with factory engineered kits. Spring wire connectors are not allowed for terminating of motor conductors.
- F. Motor connection kits shall consist of one hole copper compression lugs for 6 AWG and larger, split bolt connector for 8 AWG and smaller, and motor lead pigtail splice kit. Individual components shall be as follows:
- G. Split bolt connectors shall be for use with copper conductors only.
- H. Lug size shall be selected based on motor and feeder wire sizes installed.
- Pigtail splice kit shall consist of one-hole lug cover, locking pin, silicone grease, and mastic sealing strip. Kit shall be selected based on motor, feeder, and lug sizes installed.
- J. No splices will be allowed unless approved by the engineer.
- K. Provide preprinted adhesive or heat shrink-type wire numbering labels at all terminations.
- L. Wire numbering preprinted on the conductor, flag-type labels, and individual wraparound numbers (e.g., Brady labels) are not acceptable.
- M. Color code wiring as required by WSEC using manufacturer-applied color coded insulation covering. Do not use marking tape or other means of electrical conductor identification.
- N. Circuits 150 feet or over shall be sized for a maximum 2% voltage drop.

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- O. Provide a dedicated neutral for each branch circuit or feeder requiring a neutral. Ampacity of neutral conductor shall match that of the branch circuit or feeder.
- P. Provide junction or pull boxes to facilitate the "pulling in" of wires or to make necessary connections. All raceways and apparatus shall be thoroughly blown out and cleaned of foreign matter prior to pulling in wires.
- Q. Install wire in raceway after interior of building is enclosed, watertight, and dry, and all mechanical work likely to injure conductors has been completed.
- R. Completely and thoroughly swab raceway system before installing conductors.
- S. Conductors No. 6 AWG and larger shall be pulled into conduits by hand or by utilizing a tugger with built-in tension meter. Other motorized machines of any type are not allowed for any wire pulling. CONTRACTOR shall provide a report to ENGINEER for each pull indicating maximum tension reached during the pull along with manufacturer's maximum pulling tension.
- T. Conductors shall be installed in conduit system in such a manner that insulation is not damaged, conductors are not overstressed in pulling, and walls are not damaged. No splices are permitted except in junction boxes or outlet boxes.
- U. Circuiting is indicated diagrammatically on the Drawings.
- V. Prior to energizing, check conduit, raceways, outlet boxes, and wire for continuity of circuitry and for short circuits. Correct malfunction when detected.
- W. Perform continuity test on all power and equipment branch circuit conductors. Verify proper phasing connections.
- X. Install all wiring in raceways except as otherwise noted. This includes all low-voltage wiring.

## **SECTION 26 05 26**

#### **SECONDARY GROUNDING**

- A. Ground rods shall be copper-bonded, 5/8-inch diameter; minimum length 10 feet.
- B. Ground connections below grade shall be exothermic type by Cadweld, compression type by ABB (Thomas & Betts), or approved equal. Compression connectors shall be prefilled with an oxide inhibitor.
- C. Compression-type connectors shall be installed with the manufacturer recommended tools. Compression dies shall emboss an index on the connector when installed correctly. An indenter crimp shall be made on ground rods prior to connection of grounding conductor.
- D. Provide a separate insulated equipment grounding conductor for each feeder and branch circuit. Terminate each end on a grounding lug, bus, or bushing.
- E. Bond together system neutrals, service equipment enclosures, exposed noncurrent carrying metal parts of electrical equipment, metal raceway systems, grounding conductor in raceways and cables, and receptacle ground connectors.
- F. Connect grounding electrode conductors to metal frame of building or structure and structural reinforcing bars using suitable ground clamps.
- G. Ground system and equipment as required by code and local ordinances.
- H. All bare copper conductors installed outdoors shall be buried a minimum of 2 feet below grade.

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- I. A minimum of three ground rods at 15-foot separations near service entrance of each building shall be provided. These shall be connected to ground bus by conductors sized to code requirements. The above are minimum requirements.
- J. All grounding electrode conductors shall be installed in PVC conduit. All conduit bends shall be made using sweep elbows. Conduit bodies and 90-degree bends are not allowed.
- K. Include ground for grounded receptacles, light fixtures, motors, and equipment items shown on the drawings.
- L. Flexible connections do not qualify for ground. All flexible connections must have separate green ground wire from motor base, lighting fixture, or equipment frame to conduit system.
- M. Provide a separate grounding conductor system for the grounding of all lighting fixtures and devices installed in the same conduit as the branch circuit conductors. Ground conductors shall be individually connected at each fixture or device.
- N. All equipment in areas that are fed from circuits in PVC conduit shall be provided with a separate green ground wire that is terminated at the metallic conduit system and the equipment.
- O. Inspect grounding and bonding system conductors and connections for tightness and proper installation.

#### **SECTION 26 05 29**

## **SUPPORTING DEVICES**

- A. Support members shall be 316 stainless steel and be manufactured by Unistrut P-1000, B-line, Superstrut, or approved equal.
- B. Hardware shall be stainless steel, except PVC-coated steel clamps and stainless steel hardware shall be used with stainless steel support members where used to support PVC-coated rigid steel conduit.
- C. All supporting devices and support structures shall be constructed such that the structure adequately supports the load of the equipment installed on it including any wind and/or snow loads. Provide support members to adequately support load.
- D. Do not use spring steel clips and clamps.
- E. Install surface-mounted cabinets and panelboards with a minimum of four anchors.
- F. Do not use chain, wire rope, or perforated strap hangers.

## **SECTION 26 05 33**

## **CONDUIT**

- All interior conduit 12'-0" above finished grade and higher shall be heavy wall rigid, Schedule 80 PVC.
- B. All conduit installed in earth shall be heavy wall rigid, Schedule 80 PVC unless located within 4 feet of building. PVC coated rigid steel conduit shall be used for conduit runs within 4 feet of building or structure footing.
- C. Conduit for service entrance grounding electrode conductors shall be heavy wall rigid, Schedule 80 PVC.
- D. All interior conduit between 0'-0" and 12'-0" above finished grade and all exterior conduit shall be rigid aluminum or PVC-coated rigid steel.
- E. Rigid aluminum conduit shall be ANSI C80.5 and UL6A, heavy wall conduit.
- F. All conduit protruding from concrete slabs and passing through foundation walls shall be PVC coated rigid steel.

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- G. PVC coated rigid steel conduit shall be internally and externally hot dipped galvanized rigid metal conduit with hot dipped galvanized threads and PVC coating. PVC coating shall be UL Listed with rigid metal conduit, and PVC coating shall have external 40 mil thickness with an internal 2 mil urethane coating. Acceptable manufacturers shall be Plasti-bond RedH2OT by Robroy Industries, Ocal-Blue by ABB (Thomas & Betts), Calbond, or equal. All installers shall be field-certified from the factory for installation and shall provide proof of certification. PVC-coated conduit and fittings shall meet the following listings and manufacturing standards, without exception:
  - 1. ANSI C80.1.
  - 2. UL6.
  - 3. NEMA RN1.
- H. Polyvinyl chloride (PVC) conduit shall be heavy wall rigid, Schedule 80 PVC, and be UL listed for underground, encased, and aboveground applications. PVC conduit installed in exterior locations shall be UV resistant.
- I. All conduit used for equipment connections shall be liquid-tight flexible metal conduit. Liquid-tight flexible metal conduit shall be electro-galvanized single strip steel with integral grounding conductor continuously enclosed within the entire length of the convolutions. The flexible PVC jacket shall be sunlight-resistant, flame-retardant, and resistant to damage from mild acids. Fittings shall be stainless steel, UL listed with thermoplastic elastomer sealing gasket.
- J. All runs of flexible conduit to equipment and devices shall be as short as practicable, of the same size as the conduit it extends, and with enough slack to reduce the effects of vibration to a minimum. A minimum of 18 inches of liquid-tight flexible conduit shall be installed for each motor. Liquid-tight flexible metal conduit shall be installed in such a manner that liquids tend to run off the surfaces and not drain toward the fittings.
- K. All conduit shall be UL listed for the application where being used. All conduit shall be minimum 3/4" size, except 1/2" for liquid-tight conduit.
- Conduits shall be attached to building surfaces and not suspended unless installed in a strut channel-type conduit rack. Individual conduits shall not be suspended.
   Clevis hangers are not allowed. Run conduits grouped and parallel or perpendicular to construction.
- M. Conduits shall not be run in slabs-on-grade. Conduit attached to building surfaces shall be spaced out to avoid rust and/or corrosion using fittings approved for the use.
- N. Use back-straps on all conduit or mount conduit with strut channel straps as specified under Section 26 05 29 Supporting Devices.
- O. Conduit penetrations for all enclosures (e.g., disconnects, junction boxes, panelboards) shall utilize watertight hubs and enter the sides or bottom of the enclosure. Conduits shall not penetrate the top of the enclosure. Watertight hubs shall be diecast, insulated and gasketed, rated for wet or dry locations indoors or outdoors, and be the same material as the conduit being used.
- P. All conduit installed below grade shall be buried a minimum of 2 feet bedded in compacted sand with a minimum of 6-inch cover on all sides.
- Q. Provide conduit expansion-deflection fittings in all conduit runs where movement perpendicular to axis of conduit may be encountered.
- R. Conduit bends for PVC conduit shall be made using a hot box, heat blanket, or glycol bender. Open flame or point heat sources of any type are not allowed.
- S. Routing of conduits on exterior of buildings shall be avoided to the extent possible and shall not cover or interfere with lighting, signage, or other openings.
- T. Provide conduit expansion fittings as specified herein in all conduit runs that cross a structural expansion joint and for conduits protruding from earth.

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## **SECTION 26 05 35**

#### **BOXES**

- A. All switch, outlet, and pull and junction boxes shall be deep-type, gasketed cover, threaded hubs, and be cast of aluminum or be PVC-coated rigid metal to match conduit installation, unless noted otherwise.
- B. Pull and junction boxes where used with PVC conduit shall be PVC or FRP, with proper cover and gasket.
  - All boxes attached to building surfaces shall be spaced out to avoid rust and/or corrosion.
  - 2. All boxes shall be on 1/2-inch standoffs.
  - 3. Support pull and junction boxes independent of conduit.

#### **SECTION 26 05 53**

## **ELECTRICAL IDENTIFICATION**

- A. Nameplates shall be provided for SPDs; cabinets, enclosures, pull, and junction boxes; disconnect switches; and panelboards. Nameplate material shall be multicolor, 2-layer, nonconductive engraving plastic suitable for permanent installations in indoor and outdoor locations. The material shall be UV-resistant and suitable for installation in direct sunlight. Nameplates shall include equipment number and description (i.e., Lighting Panel LP-1), with background and character color as selected by department.
- B. Wire and cable markers shall be permanently-attached, heat-shrink type labels. Sleeve shall be permanent, PVC, white, with legible machine-printed black markings. Wire or cable numbering preprinted on the conductor or cable insulation, flag-type labels, and individual wraparound numbers (such as Brady preprinted markers) are not acceptable. All wire markers shall be the same throughout the project.
- C. Affix nameplates with weatherproof, UV-resistant adhesive in outdoor locations and sticky back adhesive in indoor locations.
- D. Provide wire markers on each conductor, including neutral and spare conductors, in panelboard gutters, pull boxes, outlet and junction boxes, and at load connection. Neutral conductor labels shall include the associated branch circuit number. Identify with branch circuit or feeder number for power and lighting circuits. Spare conductors shall have control wire number or shall indicate termination point of wire.
- E. Power conductor insulation color code for equipment grounding shall be green, and shall be white for grounded neutral, black for one hot leg, and red for the other hot leg in 120/240 volt, single phase systems. The third phase shall be blue in three phase systems.
- F. Circuit Identification:
  - 1. Identify power and control conductors at each termination and at accessible locations such as junction and pull boxes, panelboards, etc.
  - 2. Conductors for panelboard circuits shall identify circuit matching the circuit directory designations, including the neutral conductor.
- G. All junction boxes shall be labeled with permanent nameplates. Nameplates shall indicate circuit or load served, as well as the power source and highest voltage present on any conductor.

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#### **SECTION 26 21 00**

#### **ELECTRICAL SERVICE SYSTEM**

#### 1.01 SUMMARY

- A. Work Included:
  - 1. Utility Company.
  - 2. Secondary service characteristics.
  - 3. Definitions.
  - 4. Sequencing, scheduling.
  - 5. Underground electric service.

#### 1.02 UTILITY COMPANY

A. The utility company is WE Energies. Contact Johanna Chizek, (920) 450-3856, before beginning any work on the electrical service system.

#### 1.03 SECONDARY SERVICE CHARACTERISTICS

A. The secondary service will be 120/240-volt, 3-wire, single phase for combined lighting and power.

#### 1.04 DEFINITIONS

- A. Service: As defined in the NEC, Article 100.
- B. Primary Voltage: Above 600 volts.
- C. Secondary Voltage: 600 volts and below.

## 1.05 SEQUENCING, SCHEDULING

- A. Provide electrical service system, except the Utility Company will provide:
  - Pole-mounted transformer.
  - 2. Cable from transformer to meter pedestal (meter pedestal provided by contractor).
  - Meter (in contractor provided meter pedestal meter socket).

#### 1.06 UNDERGROUND ELECTRICAL SERVICE

A. Provide complete underground electrical service except for items furnished and installed by the Utility Company.

#### **SECTION 26 24 16**

#### **PANELBOARDS**

- A. Panelboard shall be 120/240 volt, single phase, 30 circuit, having an interrupt rating of 10 kAIC, 100 amp rated with 100 amp service entrance rated Main Circuit Breaker. Panelboard shall have individually mounted main circuit breaker; branch mounted main circuit breakers are not allowed.
- B. Panelboard front covers shall be hinged to allow access to wiring gutters without removal of panel trim (door-in-door type). All fronts shall be complete with cylinder-type lock and catch, and all cylinders shall be keyed alike. Provide two keys per panelboard. Panelboard enclosure NEMA rating shall be as indicated on the drawings.
- C. Panelboards shall have full ampacity copper bussing throughout (full length of panel).
- D. Panel shall have separate ground and neutral buss bars.

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- E. All branch circuit breakers shall be quick-make, quick-break, with thermal magnetic trip bolt-on type. Multipole breakers shall have common internal trip, UL listed as multipole units; handle ties are not permitted. All breakers shall be of the same manufacturer as the panelboard and provided at ampere capacity as scheduled.
- F. Main circuit breakers shall be thermal magnetic trip type.
- G. Lugs for incoming feeders shall be UL listed for use with copper conductors. Lugs shall be sized by CONTRACTOR according to feeder sizes shown. Main breakers shall be top- or bottom-mounted to coordinate with incoming feeder entrance location. Location shall be selected by CONTRACTOR.
- H. Panelboards shall be service entrance rated where noted on the drawings. Neutral bus shall be bonded to ground bus. Provide ground lug sized as required for termination of main grounding electrode.
- Balance load on panelboards so phases are balanced to within 15% of each other. Reconnect or redistribute circuits and/or circuit breakers to achieve balanced condition. Submit ammeter readings for all panelboard feeders indicating normal operating load and phase balance.
- J. Provide typewritten panel schedule in panelboards.

# SECTION 26 27 26 WIRING DEVICES

#### A. Receptacles:

- GFCI Receptacles with a weather-resistant (WR) rating: Weather-Resistant duplex convenience receptacle with integral ground fault current interrupter meeting the requirements of UL standard 943 Class-A, including self-test functionality and reverse line-load misfire function repeatability. WR GFCI receptacles shall be Hubbell GFR5362SG\*, Leviton GFWR2-\*, Pass & Seymour 2097TRWR\*, or approved equal. (\* indicates color selection).
- 2. All receptacles shall have an enclosure that is weatherproof whether or not the attachment plug is inserted. Covers shall be gasketed metal with hinged "in-use" device covers, powder coat painted. Non-metallic covers are not allowed. Covers shall be latching type and shall be lockable. Covers shall be identified as "extra-duty" type per NEC 406.9(B)(1).
- 3. Receptacles shall be mounted vertically.
- 4. GFI receptacles shall not be series wired.
- 5. Mounting height for all receptacles shall be 48 inches above finished floor.

#### B. Wall Switches:

- All light switches shall be industrial specification grade, snap switch, 20 amperes, 277 volts, number of poles as shown on the drawings. Light switches shall be Eaton 122\*, Leviton 122\*, or Pass and Seymour PS20AC\* (\*Complete catalog number for pole arrangement necessary).
- 2. All light switches shall have NEMA 4X, industrial gray weatherproof toggle switch covers.
- 3. Mounting height for all light switches shall be 48 inches above finished floor.

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- C. Individual labels shall be placed on the back of all switch faceplates and receptacle faceplates indicating the lighting panel and circuit from which the switch or receptacle is fed. Labels shall be white background with black lettering no smaller than 12-point font. Provide permanently attached self-adhesive type, machine fed, and self-laminating labels, or equal. All labels must be by the same manufacturer, same size, and same font. Handwritten labels are not acceptable.
- D. Phase Converters: Contractor shall obtain the services of L.W. Allen-Altronex, (608) 222-8622, Integrated Process Solutions, (608) 849-4375, or Wunderlich-Malec (952) 933-3222 to furnish the following for installation by contractor where shown on the drawings:

#### 1. Phase Converter:

- 1. Digital phase converters shall convert 240-volt, single-phase power to 240-volt, three-phase power using solid state technology without any moving parts to regulate phase-to-phase voltage imbalance to less than 2%.
- Phase converter shall be rated to hard start a motor of minimum 3 HP. The phase converters shall be suitable for use with the three phase overhead coiling door motors with sensitive solid state electronics to be provided. Contractor shall confirm phase converter is adequately sized for Overhead Coiling Door motor to be provided with phase converter manufacturer prior to ordering.
- 3. Phase converter shall be UL listed or Electrical Testing Laboratories (ETL) listed to conform to UL standards.
- 4. Phase converter shall have low harmonic content safe for operating sensitive electronic equipment and shall comply with IEEE 519 to meet utility regulator standards.
- The minimum phase converter efficiency shall be 98.7% or better.
- 6. The phase converter short circuit rating shall be a minimum of 10,000 amps.
- 7. Phase converter shall be Phase Perfect Model PTE-007 as manufactured by Phase Technologies, or equal.
- 2. Phase converter shall be mounted within an outer NEMA 4X stainless steel, insulated enclosure. The enclosure shall be front access only, minimum No. 14 gauge steel, with continuously-hinged doors. Each door shall be equipped with 3-point latch with top and bottom bolts actuated by one rotating, lockable handle. Provide a sunshield for enclosure, a door stop kit for each door, and data pocket for wiring diagrams. All doors and panels shall be gasketed. Provide enclosure dimensions as necessary. Enclosures shall be as manufactured by Hoffman or Saginaw.
- 3. The outer enclosure shall be provided with a thermostatically-controlled closed-loop air conditioner mounted to the side of the enclosure to provide heating and cooling within the enclosure. The air conditioner shall be NEMA 4X stainless steel, be by the same manufacturer as the enclosure, and shall be Hoffman T-series or Saginaw Enviro-Therm series. Enclosure supplier shall size heating and cooling system as required to maintain enclosure interior temperature within the phase converter operating temperature range with a minimum 10°F buffer on each end of the operating range. Air conditioner sizing calculations shall be submitted with shop drawings.
- 4. Provide a 20 amp, 120VAC main circuit breaker within the outer enclosure for power to the air conditioner.

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- The enclosure assembly short circuit rating shall be a minimum of 10,000 amps.
- 6. The completed assembly shall be built to UL 508 standards by a UL panel shop but does not need to be UL listed as an assembly.

#### **SECTION 26 27 28**

#### **DISCONNECT SWITCHES**

- A. Nonfusible disconnect switches shall be NEMA KS 1; heavy-duty, quick-make, quick-break, load interrupter enclosed knife switch with externally-operable handle interlocked to prevent opening front cover with switch in "On" position. A defeater shall be provided to bypass this interlock. Handle lockable in "Off" position. Enclosure shall be NEMA 4X, stainless steel. Switches shall have a UL listed short-circuit rating of 10,000 rms symmetrical amps or more when protected by any overcurrent protective device rated no greater than the ampere rating of the switch.
- B. Provide manufacturer's equipment ground kit in all disconnect switches.
- C. Wiring within disconnects shall only be for loads or equipment served by that disconnect. Foreign wiring within disconnect enclosures is not allowed. All wiring within disconnect enclosures shall be landed on lugs or terminals provided by the disconnect manufacturer. Splices and spring wire connectors are not allowed within disconnect enclosures.

#### **SECTION 26 43 13**

## SURGE PROTECTIVE DEVICES (SPD)

- A. Service entrance surge protective device shall provide effective energy surge diversion for application in ANSI/IEEE C62.41-2002 location Category C3 environments. Testing shall be per ANSI/IEEE C62.45-2002 using ANSI/IEEE C62.41 Category C3 waveforms and amplitudes.
- B. The system individual unit shall be UL listed under UL1449, latest edition, Standard for Surge Protective Devices (SPD). Surge ratings shall be permanently affixed to the SPD.
- C. Surge protective device shall be MOV type.
- D. Operating Voltage: Maximum continuous operating voltage shall be no less than 115% of the nominal rated line voltage.
- E. The maximum surge current capacity of the specified system, based on the standard IEEE 8/20 microsecond waveform, shall be at least 160 kA per phase. The surge life (8/20) shall be at least 6 kA for 10,000 occurrences or 10 kA at 20 kV for 16,000 occurrences. The transient suppression capability shall be bidirectional and suppress both positive and negative impulses. SPD shall have a nominal discharge rating (In) of 10 kA.
- F. The SPD shall have a minimum Short Circuit Rating (SCCR) of 100 KAIC. The interrupt capability must be confirmed and documented by a recognized independent testing laboratory.
- G. The suppressor shall be designed so as to minimize the internal surge path impedance. Direct point-to-point internal wiring is inherently inductive and not acceptable. Connection to the power service shall be constructed as shown in the manufacturer's installation notes for best performance.
- H. The system shall be constructed using field replaceable plug-in modules. The module shall consist of multiple fuse protected metal oxide varistors. The status of each module shall be locally monitored with a red LED that will illuminate if the module protection is reduced. Protector shall provide redundant protection within each phase module with multiple surge rated fuses per module or one fuse per MOV.

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- I. Red and green solid-state LED indicators shall be provided on the hinged front cover to indicate protection status. An illuminated green LED indicates power is present at the protector on all phases, and an illuminated red LED shall indicate that one or more of the modules have reduced protection. Both front panel and internal LEDs are required to provide power and fault indications. Relay operation shall be in a failsafe operating mode, i.e., continuously energized so that power failure, reduced protection, or a break in the remote monitoring line will cause a fault indication at the remote monitor. Neon indicators are not permitted.
- J. Relay alarm contacts shall be provided for remote alarm monitoring capability of unit status. Surge protected normally open and normally closed contacts shall be provided.
- K. The system shall be equipped with an audible alarm which shall be activated when any one or more of the modules has a reduced protection condition. A mute switch shall be provided for the audible alarm.
- L. A 14 gauge, NEMA Type 4X, stainless steel enclosure, with corrosion-resistant hardware shall be provided for the unit.
- M. Unit shall be suitable for use in Type 2 locations and provide maximum ANSI/UL 1449 VPRs for 120/240-volt, single phase systems.
  - 1. L-N = 800 V.
  - 2. L-G = 900 V.
  - 3. N-G = 700 V.
  - 4. L-L = 1500 V.
- N. Service entrance devices shall be as manufactured by MCG 160M Series, Square D EMA/IMA Series, Eaton SPD Series, or approved equal.
- O. The installation and testing of the system shall be in full accordance with the manufacturer's installation and maintenance instructions and all national and local codes.
- P. Each installed device shall be fed by an appropriately sized circuit breaker, per the manufacturer's installation notes, in the protected panel. No SPD shall be installed without an upstream overcurrent device.
- Q. Units shall be installed as close as practical to the electrical panel. Low impedance cabling furnished by the manufacturer shall be utilized for installations with lead lengths greater than, or equal to, 5 feet. Low impedance cabling furnished by the manufacturer or appropriately-sized standard cable, if acceptable to ENGINEER, may be utilized for installations with lead lengths less than 5 feet. SPD leads shall be as short as possible.

#### **SECTION 26 51 13**

#### LIGHTING

- A. Interior Type A Light Fixtures
  - Interior (Type A) light fixtures shall be 179 watt, 120 volt, 24,000 lumen, 5000K color temperature, LED fixtures, with stainless steel latches and corrosion resistant finish, manufactured by Metalux model VT4LED-LD5-24-DR-UNV-L850-CD2-WL-SSL-U, Linmore model HD20S-A1-24K-4N-50-80-CL-LV-MLT-SSLCH-10V, Lithonia model FHE-L48-24000LM-ACL-MD-MVOLT-GZ10-50K-80CRI-WLF, or approved equal.
  - 2. Fixture shall have internal fusing.
  - 3. Fixture shall be UL listed, ETL listed, or CSA-US listed for wet locations.

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4. Provide mounting hardware as necessary for mounting locations shown on the drawings.

#### B. Exterior Type B Light Fixtures

- Exterior (Type B) light fixtures shall be 110 watt, 120 volt, 10000 lumen, 5000K color temperature Type 3 medium distribution, enclosed LED fixtures with integral photocell, manufactured by Cree model SEC-EDG-3M-WM-10-E-UL-BZ-350-50K-P, McGraw-Edison model GWC-SA2A-750-1-T3-BZ-BCP, GE model EWAS-01-1-D3-AW-7-50-N-3-FM-DKBZ, or approved equal.
- Fixture shall have internal fusing. Fixture shall be UL listed for wet locations.
- 3. Provide mounting hardware as necessary for mounting locations shown on the drawings.

#### C. Exterior Type C Light Fixtures

- Exterior (Type C) light fixtures shall be 46 watt, 120 volt, 4000 lumen, 5000K color temperature Type 3 medium distribution, enclosed LED fixtures with integral photocell, manufactured by Cree model SEC-EDG-3M-WM-04-E-UL-BZ-350-50K-P, McGraw-Edison model GWC-SA1A-750-1-T3-BZ-BPC, GE model EWAS-01-1-B3-AW-7-50-N-3-FM-DKBZ, or approved equal.
- 2. Fixture shall have internal fusing. Fixture shall be UL listed for wet locations.
- 3. Provide mounting hardware as necessary for mounting locations shown on the drawings.
- D. All wall-mounted fixtures shall be fed through a fixture Stud/Hickey/Nipple assembly and with provisions to prevent fixture turning.
- E. All fixtures shall be securely and adequately supported and installed. Surface- or pendant-mounted fixtures shall be attached to and supported from structural part of the building in a manner acceptable to engineer. Fixtures shall be supported by not fewer than two supports for each fixture. Where fixtures are to be suspended, they shall be mounted on steel channel with the channel supported directly from the structure by a minimum of 3/8-inch rod inside rigid conduit stems. Any fixture which has an individual fixture weight of greater than 25 pounds shall have safety cable installed, in addition to other support means. Cable shall be 3/16-inch airplane cable. All fittings and connectors shall be compression type. Cables must be secured to the building structure and to a point or points on the fixture to protect against falling parts. Support surface-mounted fixtures from structural members other than ceiling tees by providing Unistrut members spanning main ceiling tees or by mounting directly to structure.
- F. All fixture whips shall be constructed of minimum No. 12 AWG conductors.
- G. Contractor shall verify all ceiling conditions from the drawings and provide appropriate mounting accessories for each lighting fixture.
- H. Provide pendant- or surface-mounted fixtures with required mounting accessories, including hickeys, stud extensions, ball aligners, canopies, and stems. Provide mounting stems on pendant fixtures of the correct length to uniformly maintain the fixture heights shown on the drawings or established in the field.
- Before final acceptance by owner, all protective (strippable) coatings, dust, finger marks, paint spots, and any other materials deleterious to the appearance or functioning of the lighting fixtures must be removed. Abrasive cleaners are not permitted.

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## **ADDITIONAL SPECIAL PROVISION 4**

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.

## **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 is not allowed to withhold 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.

## **Acceptance and Final Payment**

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.

# Additional Special Provision 6 (ASP-6) Modifications to the standard specifications

Make the following revisions to the standard specifications:

#### 108 Prosecution and Progress

Add subsection 108.9.4.1 effective with the November 2023 letting:

#### 108.9.4.1 Winter Suspension for Completion Date Contracts

- (1) The contractor may request a winter suspension for a completion date contract. If the department determines weather conditions do not allow for the completion of the remaining work, the department may approve the contractor's request and determine the start date of the winter suspension. The end date of the winter suspension is March 31 or a date mutually agreed upon by both parties. For multi-year contracts, the department will only consider winter suspension for the final year of the contract.
- (2) During winter suspension, store all materials in a manner that does not obstruct vehicular and pedestrian traffic and protect the materials from damage. Install traffic control and other safety devices necessary to protect the traveling public and pedestrians. Provide suitable drainage and install temporary erosion control where necessary. If the winter suspension begins when liquidated damages are being assessed, or when the work has not progressed as scheduled and would not have been completed prior to the completion date, the cost of necessary pre-suspension work is incidental. If the winter suspension begins prior to the contract completion date, and the work has progressed as scheduled and would have been completed prior to the completion date, the cost of pre-suspension work will be paid as specified under 109.4.
- (3) For a winter suspension that begins prior to the contract completion date and the work has progressed as scheduled and would have been completed prior to the completion date, the engineer will extend contract time to correspond with the end of the winter suspension and liquidated damages will not be assessed during the winter suspension.
- (4) For a winter suspension that begins when liquidated damages are being assessed or when the work has not progressed as scheduled and would not have been completed prior to the completion date, the engineer will not extend contract time. Time will be suspended until the end of the winter suspension. Liquidated damages will not be assessed during the winter suspension and liquidated damages will resume at the end of the winter suspension.

#### 108.10.2 Excusable, Non-Compensable Delays

#### 108.10.2.1 General

Replace entire section with the following effective with the January 2024 letting:

- (1) Non-compensable delays, 108.10.2.1(3), are excusable delays not the contractor's or the department's fault. The engineer will not pay for the delay costs listed in 109.4.7 for non-compensable delays.
- (2) For non-compensable delays under calendar day and completion date contracts, the engineer will extend contract time if the conditions specified in 108.10.1 are met. The department will relieve the contractor from associated liquidated damages, as specified in 108.11, if the engineer extends time under 108.10.1.
- (3) The following are non-compensable delays:
  - 1. Delays due to earthquakes, other cataclysmic phenomena of nature the contractor cannot foresee and avoid, severe weather or job conditions caused by recent weather as specified in 108.10.2.2.
  - 2. Extraordinary delays in material deliveries the contractor or their suppliers cannot foresee and forestall resulting from strikes, lockouts, freight embargoes, industry-wide shortages, governmental acts, or sudden disasters.
  - 3. Delays due to acts of the government, a political subdivision other than the department, or the public enemy.
  - 4. Delays from fires or epidemics.
  - Delays from strikes beyond the contractor's power to settle not caused by improper acts or omissions of the contractor, their subcontractors, or their suppliers.
  - 6. Altered quantities as specified in 109.3.

#### 108.10.3 Excusable Compensable Delays

Replace entire section with the following effective with the January 2024 letting:

- (1) Compensable delays are excusable delays due to the department's actions or lack of actions. The engineer will grant a time extension for a compensable delay if the conditions specified in 108.10.1 are met.
- (2) The following are compensable delays:

- 1. A contract change for revised work as specified for extra work under 104.2.2.1, for a differing site condition under 104.2.2.2, or for significant changes in the character of the work under 104.2.2.4.
- 2. A contract change for an engineer-ordered suspension under 104.2.2.3.
- 3. The unexpected discovery of human remains, an archaeological find, or historical find consistent with 107.25.
- 4. The unexpected discovery of a hazardous substance consistent with 107.24.
- 5. The non-completion of work that utilities or other third parties perform, if that work is not completed as specified in the contract.
- (3) For a compensable delay or a time extension, the department will relieve the contractor from associated liquidated damages under 108.11, and will pay the contractor for delay costs determined as follows:
  - 1. Adjust the contract price as specified in 109.4.2 through 109.4.5 for delays under item 1 of 108.10.3(2).
  - 2. Adjust the contract price as specified in 109.4.7 for delays under items 2 through 5 of 108.10.3(2).

#### 310 Open Graded Base

#### 310.2 Materials

Replace paragraph two with the following effective with the November 2023 letting:

(2) The contractor may substitute material conforming to the gradation requirements for crushed aggregate specified in Table 310-01 if that material conforms to the fracture requirements for open-graded crushed gravel specified in 301.2.4.5.

#### TABLE 310-01 COARSE AGGREGATE (% passing by weight)

#### **AASHTO No. 67<sup>[1]</sup>**

AASHTO NO. 67.
COARSE AGGREGATE (% PASSING by WEIGHT) AASHTO No. 67
-
-
100
90 – 100
-
20 – 55
0 – 10
0 – 5
-
-
-
-
<=1.5

[1] Size according to AASHTO M43.

## 390 Base Patching

#### 390.4 Measurement

Replace entire section with the following effective with the November 2023 letting:

- (1) The department will measure Removing Pavement for Base Patching by the cubic yard acceptably completed. Measure the depth from the bottom of the adjacent pavement to the top of the patch.
- (2) The department will measure Base Patching Asphaltic by the ton acceptably completed as specified for asphaltic pavement in 450.4.
- (3) The department will measure Base Patching Concrete HES and Base Patching Concrete SHES by the cubic yard acceptably completed. Measure the depth from the bottom of the adjacent pavement to the top of the patch.

#### 390.5 Payment

Replace entire section with the following effective with the November 2023 letting:

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

ITEM NUMBER	<u>DESCRIPTION</u>	<u>UNIT</u>
390.0100	Removing Pavement for Base Patching	CY
390.0201	Base Patching Asphaltic	TON
390.0305	Base Patching Concrete HES	CY
390.0405	Base Patching Concrete SHES	CY

- (2) Payment for Removing Pavement for Base Patching is full compensation for removing old pavement; for preparing the foundation and bringing up to grade. If the engineer orders the contractor to excavate yielding or unstable subgrade materials and backfill with suitable materials, the department will pay for that work with contract bid items or as agreed upon using 109.4.
- (3) Payment for Base Patching Asphaltic is full compensation for providing and compacting asphaltic mixture including asphaltic binder.
- (4) Payment for Base Patching Concrete HES and Base Patching Concrete SHES is full compensation for providing, curing, and protecting concrete. Payment also includes providing tie bars and dowel bars in unhardened concrete and steel within the patch. For tie bars and dowel bars provided in concrete not placed under the contract, the department will pay separately under the Drilled Tie Bars and Drilled Dowel Bars bid items as specified in 416.5.
- (5) Payment for Base Patching SHES also includes providing test data to the engineer as specified in 416.2.4.
- (6) The department will pay for sawing existing concrete pavement for removal under the Sawing Concrete bid item as specified in 690.5.

## **460 Hot Mix Asphalt Pavement**

#### 460.2.8.2.1.3.1 Contracts with 5000 Tons of Mixture or Greater

Replace paragraph four with the following effective with the November 2023 letting:

(4) Use the test methods identified below, or other methods the engineer approves, to perform the following tests at the frequency indicated:

## Blended aggregate gradations:

## Drum plants:

- Field extraction by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to WTM D8159. Gradation of resulting aggregate sample determined according to WTM T30.
- Belt samples, optional for virgin mixtures, obtained from stopped belt or from the belt discharge using an engineer-approved sampling device and performed according to WTM T11 and T27.

## Batch plants:

 Field extraction by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B; or automated extraction according to WTM D8159. Gradation of resulting aggregate sample determined according to WTM T30.

#### Asphalt content (AC) in percent:

Determine AC using one of the following methods:

- AC by ignition oven according to WTM T308.
- AC by chemical extraction according to AASHTO T-164 method A or B.
- AC by automated extraction according to WTM D8159.
- If the department is using an ignition oven to determine AC, conform to WTP H003.
- If the department is not using an ignition oven to determine AC, ignition oven correction factor (IOCF) must still be reverified for any of the reasons listed in WTP H003 Table 2 and conform to WTP H-003 sections 3 through 6.
- Gradation of resulting aggregate sample determined according to WTM T30.

#### Bulk specific gravity of the compacted mixture:

According to WTM T166.

Theoretical maximum specific gravity:

According to WTM T209.

Air voids (Va) by calculation according to WTM T269.

VMA by calculation according to WTM R35.

## 460.2.8.3.1.4 Department Verification Testing Requirements

Replace paragraph three with the following effective with the November 2023 letting:

(3) The department will perform testing conforming to the following standards:

Bulk specific gravity (G<sub>mb</sub>) of the compacted mixture according to WTM T166.

Maximum specific gravity (Gmm) according to WTM T209.

Air voids (Va) by calculation according to WTM T269.

VMA by calculation according to WTM R35.

Asphalt content by ignition oven according to WTM T308, chemical extraction according to AASHTO T-164 method A or B, or automated extraction according to WTM D8159. If using an ignition oven to determine AC, conform to WTP H-003.

## 460.3.3.2 Pavement Density Determinations

Replace entire section with the following effective with the February 2024 letting:

- (1) The engineer will determine the target maximum density using department procedures described in WTM T355. The engineer will determine density according to CMM 815 and WTM T355 as soon as practicable after compaction and before placement of subsequent layers or before opening to traffic.
- (2) Do not re-roll compacted mixtures with deficient density test results. Do not operate continuously below the specified minimum density. Stop production, identify the source of the problem, and make corrections to produce work meeting the specification requirements.
- (3) A lot is defined as one day's production for each sublot type or one production shift if running 24 hours per day and placed within a single layer for each location and target maximum density category indicated in table 460-3. The lot density is the average of the tests taken for that lot. The department determines the number of tests per lot according to WTP H-002.
- (4) An HTCP-certified Nuclear Density Technician I (NUCDENSITYTEC-I) or a nuclear density ACT working under a NUCDENSITYTEC-I technician, will locate samples and perform the testing. A NUCDENSITYTEC-I technician will coordinate and take responsibility for the work an ACT performs. No more than one ACT can work under a single NUCDENSITYTEC-I technician. The responsible NUCDENSITYTEC-I technician will ensure that sample location and testing is performed correctly, analyze test results, and provide density results to the contractor weekly.

#### **503 Prestressed Concrete Members**

#### 503.2.2 Concrete

Replace paragraph five with the following effective with the November 2023 letting:

(5) Furnish prestressed concrete members cast from air-entrained concrete, except I-type girders may use non-air-entrained concrete. Use type I, IL, IS, IP, IT, II, or III cement. The contractor may replace up to 30 percent of type I, IL, II, or III cement with an equal weight of fly ash, slag, or a combination of fly ash and slag. Ensure that fly ash conforms to 501.2.4.2.2 and slag conforms to 501.2.4.2.3. Use only one source and replacement rate for work under a single bid item. Use a department-approved air-entraining admixture conforming to 501.2.5.2 for air-entrained concrete. Use only coarse aggregate conforming to 310.2(2).

#### 604 Slope Paving

#### 604.2 Materials

Replace paragraph three with the following effective with the November 2023 letting:

(3) Under the Slope Paving Crushed Aggregate bid item, furnish crushed stone or crushed gravel conforming to the gradation in Table 604-01, but with the additional requirements that at least 75 percent of the particles, by count, have at least one fractured face. Determine fracture according to WTM D5821.

## TABLE 604-01 COARSE AGGREGATE (% passing by weight)

#### AASHTO No. 4<sup>[1]</sup>

SEIVE	COARSE AGGREGATE (% PASSING by WEIGHT) AASHTO No. 4
2-inch	100
1 1/2-inch	90 - 100
1-inch	20 - 55
3/4-inch	0 - 15
1/2-inch	-
3/8-inch	0 - 5
No. 4	-
No. 8	-
No. 16	-
No. 30	-
No. 50	-
No. 100	-
No. 200	<=1.5

<sup>[1]</sup> Size according to AASHTO M43.

#### 612 Underdrains

#### 612.3.9 Trench Underdrains

Replace paragraph one with the following effective with the November 2023 letting:

(1) Under the Underdrain Trench bid item, excavate and backfill underdrain trenches. Backfill with coarse aggregate gradation conforming to 604.2(3). Before backfilling place geotextile as the plans show.

## 614 Semi-rigid Barrier Systems and End Treatments

## 614.2.6 Sand Barrel Arrays

Replace paragraph one with the following effective with the November 2023 letting:

(1) Furnish sand barrels from the APL. Use fine aggregate conforming to gradation shown in Table 614-2 mixed with sodium chloride conforming to AASHTO M143. Apply an object marker to front-most barrel in the array.

**TABLE 614-2 FINE AGGREGATE GRADATION** 

SEIVE	FINE AGGREGATE (% PASSING by WEIGHT)
3/8-inch	100
No. 4	90 - 100
No. 8	-
No. 16	45 - 85
No. 30	-
No. 50	5 - 30
No. 100	0 - 10
No. 200	<=3.5

#### **628 Erosion Control**

#### 628.2.13 Rock Bags

Replace paragraph two with the following effective with the November 2023 letting:

(2) Fill the bags with a clean, sound, hard, durable, engineer-approved coarse aggregate conforming by visual inspection to the gradation specified for coarse aggregate gradation in 604.2(3).

#### 639 Drilling Wells

## 639.2.1 General

Replace paragraph two with the following effective with the November 2023 letting:

(2) For grout use fine aggregate conforming to 501.2.7.2; and gradation conforming to 614.2.6(1); and type I, IL, IS, IP, or IT cement.

#### 652 Electrical Conduit

#### 652.3.1.2 Installing Underground

Replace paragraph two with the following effective with the November 2023 letting:

(2) Excavate trenches true to line and grade to provide the conduit uniform bearing throughout its length. Do not backfill the trench before inspecting the conduit. Carefully tamp the backfill in place as specified for placing backfill in layers in 651.3. Place at least 0.7 cubic feet of coarse aggregate gradation conforming to 604.2(3) directly under each drainage hole.

#### **ERRATA**

## 390.3.4 Special High Early Strength Concrete Patching

Correct errata link in paragraph (1) by changing from 416.3.8 to 416.3.7.

- (1) Construct as specified for special high early strength repairs under 416.3.7 except as follows:
  - The contractor may delay removal for up to 14 calendar days after cutting the existing pavement.
  - Open to traffic as specified for concrete base in 320.3.

## **ADDITIONAL SPECIAL PROVISION 7**

- A. Reporting 1<sup>st</sup> Tier and DBE Payments During Construction
  - 1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
  - 2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
  - 3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
  - 4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
  - 5. DBE firms must enter all payments to DBE and non-DBE firms regardless of tier.
  - 6. 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).
  - 7. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4), (5), and (6), and shall be binding on all first tier subcontractor relationships, all contractors and subcontractors utilizing DBE firms on the project, and all payments from DBE firms.
- 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 <a href="mailto:paul.ndon@dot.wi.gov">paul.ndon@dot.wi.gov</a> 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

## **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 <a href="mailto:paul.ndon@dot.wi.gov">paul.ndon@dot.wi.gov</a>. 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, subrecipients 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).

## **BUY AMERICA PROVISION**

Buy America (as documented in <u>88 FR 57750 (2 CFR part 184 and 200)</u> from the Office of Management and Budget: <u>Federal Register: Guidance for Grants and Agreements</u>) shall be domestic products and permanently incorporated in this project as classified in the following three categories, and as noted in the Construction and Materials Manual (CMM):

#### 1. Iron and Steel

All iron and steel manufacturing and coating processes (from the initial melting stage through the application of coatings) 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 the iron and steel manufacturing and coating processes Buy America 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.

#### 2. Manufactured Product

All manufactured products (as defined in CMM 228.5) are covered under a previous waiver from 1983 and are currently exempt from Buy America.

#### 3. Construction Material

All construction materials (as defined in <u>88 FR 57750 (2 CFR part 184 and 200)</u> and as referenced in CMM 228.5) must comply with Buy America. All manufacturing process of construction materials must occur in the United States.

<u>88 FR 55817 (DOT-OST-2022-0124)</u> allows a limited waiver of Buy America requirements for de minimis costs and small grants.

- The Total value of the non-compliant products is no more than the lesser of \$1,000,000 or 5% of total applicable costs for the project<sup>1</sup>; or
- The total amount of Federal financial assistance applied to the project, through awards or subaward, is below \$500,000<sup>2</sup>

The contractor shall take actions and provide documentation conforming to CMM 228.5 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 DT4567 that all iron and steel, manufactured products, and construction materials conform to this Buy America provision.

Form DT4567 is available at: https://wisconsindot.gov/Documents/formdocs/dt4567.docx

Attach a list of iron or steel and construction material exemptions and their associated costs to the certification form.

<sup>1</sup> The de minimis public interest waiver does not apply to iron and steel subject to the requirements of 23 U.S.C. 313 on financial assistant administered by FHWA. The de minimis threshold in 23 CFR 635.410(b)(4) continues to apply for iron and steel. 2 The small grant portion of the waiver does not apply to iron, steel, and manufactured goods subject to the requirements of 49 U.S.C. 22905(a).





Page 1 of 4

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	201.0215 Grubbing	1.000 ACRE		
0004	205.0100 Excavation Common	619.000 CY		
0006	208.0100 Borrow	5,462.000 CY	<u>-</u>	
0008	213.0100 Finishing Roadway (project) 01. 1146-75-81	1.000 EACH		
0010	305.0110 Base Aggregate Dense 3/4-Inch	80.000 TON		
0012	305.0120 Base Aggregate Dense 1 1/4-Inch	2,400.000 TON		
0014	312.0110 Select Crushed Material	2,010.000 TON		
0016	415.0080 Concrete Pavement 8-Inch	135.000 SY	·	
0018	455.0605 Tack Coat	70.000 GAL	·	
0020	465.0105 Asphaltic Surface	780.000 TON	·	
0022	522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	2.000 EACH	·	·
0024	606.0100 Riprap Light	4.000 CY		
0026	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	110.000 LF		
0028	611.0642 Inlet Covers Type MS	2.000 EACH		
0030	611.3901 Inlets Median 1 Grate	2.000 EACH		·





Page 2 of 4

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	616.0100 Fence Woven Wire (height) 01. 5-Foot	735.000 LF	·	·
0034	618.0100 Maintenance and Repair of Haul Roads (project) 01. 1146-75-81	1.000 EACH	·	
0036	619.1000 Mobilization	1.000 EACH		
0038	624.0100 Water	25.000 MGAL	·	·
0040	625.0500 Salvaged Topsoil	2,895.000 SY		·
0042	627.0200 Mulching	7,065.000 SY		
0044	628.1520 Silt Fence Maintenance	1,650.000 LF		
0046	628.1905 Mobilizations Erosion Control	2.000 EACH	·	·
0048	628.1910 Mobilizations Emergency Erosion Control	2.000 EACH		
0050	628.2002 Erosion Mat Class I Type A	510.000 SY		·
0052	628.2004 Erosion Mat Class I Type B	440.000 SY		·
0054	628.7005 Inlet Protection Type A	2.000 EACH	·	·
0056	628.7010 Inlet Protection Type B	2.000 EACH		·
0058	628.7560 Tracking Pads	1.000 EACH		·
0060	628.7570 Rock Bags	45.000 EACH		·
0062	629.0210 Fertilizer Type B	4.300 CWT		·





Page 3 of 4

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
0064	630.0130 Seeding Mixture No. 30	69.000 LB		
0066	630.0200 Seeding Temporary	104.000 LB	·	
0068	630.0300 Seeding Borrow Pit	120.000 LB		
0070	630.0500 Seed Water	68.000 MGAL		·
0072	633.5200 Markers Culvert End	2.000 EACH		
0074	634.0614 Posts Wood 4x6-Inch X 14-FT	4.000 EACH		
0076	637.2230 Signs Type II Reflective F	36.000 SF		
0078	642.5201 Field Office Type C	1.000 EACH		
0080	643.0300 Traffic Control Drums	1,568.000 DAY		
0082	643.0900 Traffic Control Signs	784.000 DAY		
0084	643.5000 Traffic Control	1.000 EACH		
0086	645.0130 Geotextile Type R	12.000 SY		
0088	646.5320 Marking Railroad Crossing Epoxy	2.000 EACH		
0090	650.4000 Construction Staking Storm Sewer	2.000 EACH		
0092	650.4500 Construction Staking Subgrade	339.000 LF		
0094	650.5000 Construction Staking Base	339.000 LF		



Page 4 of 4

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
0096	650.7000	60.000		
	Construction Staking Concrete Pavement	LF		·
0098	650.9911	1.000		
	Construction Staking Supplemental Control (project) 01. 1145-75-81	EACH	·	·
0100	650.9920	339.000		
	Construction Staking Slope Stakes	LF	·	·
0102	690.0150	182.000		
	Sawing Asphalt	LF	·	·
0104	715.0720	500.000		
	Incentive Compressive Strength Concrete Pavement	DOL	1.00000	500.00
0106	SPV.0035	205.000		
	Special 01. Engineered Soils	CY	·	·
0108	SPV.0060	1.000		
	Special 01. Salt Storage Facility	EACH	·	·
	Section:	0001	Total:	·

**Total Bid:** 

# PLEASE ATTACH ADDENDA HERE



# **Wisconsin Department of Transportation**

April 24, 2024

# **Division of Transportation Systems Development**

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

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

## **NOTICE TO ALL CONTRACTORS:**

Proposal #16: 1146-75-81

STH 76 - New London CTH JJ - CTH T/Givens Rd

**STH 15** 

**Outagamie County** 

## Letting of May 14, 2024

This is Addendum No. 01, which provides for the following:

## **Special Provisions:**

	Revised Special Provisions			
Article	Article Description			
No.	Description			
14	14 Engineered Soils, Item SPV.0035.01			
15	Salt Storage Facility, Item SPV.0060.01			

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 1146-75-81 April 24, 2024

## **Special Provisions**

## 14. Engineered Soils, Item SPV.0035.01.

Replace (2) under section titled **B Materials** with the following:

(2) Provide sand meeting the graduation requirements of USDA Coarse sand (0.02-0.04 inches) or ASTM C33 (fine aggregate concrete sand). Provide sand consisting of mineral sand that is at least 97% Si0<sub>2</sub>. Substitutions, such as calcium carbonated sand or dolomitic sand may also be used. Manufactured sand or stone dust will not be allowed. Wash the sand to remove clay and silt particles, and well drain prior to mixing.

## 15. Salt Storage Facility, Item SPV.0060.01.

Replace paragraph e. under subsection titled G. <u>Building Walls</u> under section titled **PART 3 – DESIGN CRITERIA & PRODUCTS** with the following:

e. Design the walls to resist a salt and sand load of 80 pounds per cubic foot and to resist a horizontal impact load from a loader.

**END OF ADDENDUM** 



## **Wisconsin Department of Transportation**

April 29, 2024

# **Division of Transportation Systems Development**

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

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

## **NOTICE TO ALL CONTRACTORS:**

Proposal #16: 1146-75-81

STH 76 - New London CTH JJ - CTH T/Givens Rd

**STH 15** 

**Outagamie County** 

## Letting of May 14, 2024

This is Addendum No. 02, which provides for the following:

## **Special Provisions:**

	Revised Special Provisions			
Article No.	Description			
14	Engineered Soils, Item SPV.0035.01			

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 1146-75-81 April 29, 2024

## **Special Provisions**

## 14. Engineered Soils, Item SPV.0035.01.

Replace subsection (2) under section titled **B Materials** with the following:

(2) Provide sand meeting the graduation requirements of USDA Coarse sand (0.02-0.04 inches) or ASTM C33 (fine aggregate concrete sand). The preferred sand component should come from a naturally occurring pit or borrow source and consist primarily of (>50%) Si0<sub>2</sub>. Manufactured sand or stone dust will not be allowed. Wash the sand to remove clay and silt particles, and well drain prior to mixing.

**END OF ADDENDUM** 



# **Wisconsin Department of Transportation**

May 6, 2024

**Division of Transportation Systems Development** 

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

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

## **NOTICE TO ALL CONTRACTORS:**

Proposal #16: 1146-75-81

STH 76 - New London CTH JJ - CTH T/Givens Rd

**STH 15** 

**Outagamie County** 

## Letting of May 14, 2024

This is Addendum No. 03, which provides for the following:

## **Special Provisions:**

	Revised Special Provisions		
Article No.	Description		
4	Prosecution and Progress		
6	Holiday and Special Event Work Restrictions		

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. 03 1146-75-81 May 6, 2024

#### **Special Provisions**

## 4. Prosecution and Progress.

Replace entire article with the following:

Begin work within 10 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.

Do not begin operations earlier than July 29, 2024, unless otherwise approved by the engineer.

Complete all grading, placement of select crushed material and base aggregate, storm sewer installation and site restoration/final landscaping within the project construction limits by October 1, 2024.

## Northern Long-eared Bat (Myotis septentrionalis)

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

Ensure all operators, employees, and subcontractors working in areas of known or presumed bat habitat are aware of environmental commitments and avoidance and minimization measures (AMMs) to protect both bats and their habitat.

Direct temporary lighting, if used, away from wooded areas during the bat active season April 1 to October 31, both dates inclusive.

The department has contracted with others and will perform the following operations after October 31 and prior to April 1:

Cutting down and removing trees.

Contractor means and methods to remove additional trees will not be allowed. If it is determined that additional trees with a 3-inch or greater diameter at breast height (dbh) need to be removed beyond contractor means and methods, notify the engineer to coordinate with the WisDOT REC to determine if consultation with United States Fish and Wildlife Service (USFWS) is required. The contractor must be aware that the WisDOT REC and/or USFWS may not permit modifications.

## 6. Holiday and Special Event Work Restrictions

Replace entire article with the following:

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying Givens Road traffic, and entirely clear the traveled way and shoulders of such portions of the highway of

equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday and special event periods:

- From noon Friday, August 30, 2024 to 6:00 AM Tuesday, September 3, 2024 for Labor Day;
- From noon Friday, May 23, 2025 to 6:00 AM Tuesday, May 27, 2025 for Memorial Day.

stp-107-005 (20210113)

**END OF ADDENDUM**