

HIGHWAY WORK PROPOSAL

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

Proposal Number: **002**

<u>COUNTY</u>	<u>STATE PROJECT</u>	<u>FEDERAL</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Vernon	1646-08-72	N/A	C Westby, N Main Street; High Echo Lane to Locust Street	USH 014

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: \$310,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: February 13, 2024 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code
Contract Completion Time June 13, 2025	SAMPLE 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 Department Use Only
Excavation, Base, Concrete Pavement, Curb and Gutter, Sidewalk, HMA Pavement, Storm Sewer, Culvert Pipe, Signs, Pavement Marking, Street Lighting, Retaining Walls.	
Notice of Award Dated	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://wisconsin.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>

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

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

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

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

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

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

- (1) Download the latest schedule of items from the Wisconsin pages of the Bid Express web site reflecting the latest addenda posted on the department's web site at:
<https://wisconsin.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>
 Use Expedite™ software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express™ web site to assure that the schedule of items is prepared properly.

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

Bidder Name

BN00

Proposals: 1, 12, 14, & 22

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

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

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.

PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

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

(Signature of Attorney-in-Fact)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

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

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

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

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

(Signature of Authorized Contractor Representative)

(Date)

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

Instructions for Certification

1. By signing and submitting this proposal, the prospective contractor is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contractor shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective contractor to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department determined to enter into this transaction. If it is later determined that the contractor knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government the department may terminate this transaction for cause or default.
4. The prospective contractor shall provide immediate written notice to the department to whom this proposal is submitted if at any time the prospective contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective contractor agrees by submitting this proposal that, should this contract be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department entering into this transaction.
7. The prospective contractor further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," which is included as an addendum to PR- 1273 - "Required Contract Provisions Federal Aid Construction Contracts," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department may terminate this transaction for cause or default.

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

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

Special Provisions

Table of Contents

Article	Description	Page #
1.	General.....	3
2.	Scope of Work.....	3
3.	Prosecution and Progress.....	3
4.	Traffic.....	7
5.	Holiday and Special Event Work Restrictions.....	11
6.	Utilities.....	11
7.	Hauling Restrictions.....	18
8.	Information to Bidders, WPDES Transportation Construction General Permit (TCGP) for Storm Water Discharges.....	18
9.	Notice to Contractor – Electrical/Lighting General.....	19
10.	Coordination with Businesses and Residents.....	19
11.	Public Convenience and Safety.....	19
12.	Health and Safety Requirements for Workers Remediating Petroleum Contamination.....	20
13.	Concrete Pavement Gaps.....	20
14.	Trenching.....	20
15.	Backfill.....	22
16.	Disinfection of Water Distribution.....	23
17.	Removing Westby Locker and Meats Sign, Item 204.9060.S.001.....	25
18.	Removing or Abandoning Conduit, Item 204.9090.S.001; Removing Electrical Conductors from Existing Conduit, Item 204.9090.S.002.....	26
19.	Base Aggregate Dense 3/4-Inch, Item 305.0110.....	26
20.	Rout and Seal, Item 415.6000.S.....	26
21.	Concrete Steps.....	28
22.	Cover Plates Temporary, Item 611.8120.S.....	28
23.	Fence Safety, Item 616.0700.S.....	28
24.	Removing Signs Type II, Item 638.2602.....	29
25.	Traffic Channelizing Curb System, Item 643.0650.S.....	29
26.	Crack and Damage Survey, Item 999.1501.S.....	30
27.	Adjusting Sanitary Manholes, Item SPV.0060.001.....	31
28.	Adjusting Sanitary Cleanout Frost Sleeve, Item SPV.0060.002.....	33
29.	Hydrant Removal, Item SPV.0060.003; Valve Removal, Item SPV.0060.004.....	35
30.	Water Main Gate Valve 6-Inch, Item SPV.0060.005.....	35
31.	Fire Hydrant 6-Inch, Item SPV.0060.006.....	42
32.	Adjusting Water Valves, Item SPV.0060.007.....	45
33.	Adjusting Water Service Curb Box, Item SPV.0060.008.....	47
34.	Install City Furnished Street Lighting Unit, Item SPV.0060.009.....	49
35.	Remove and Replace Concrete Lattice Pavers, Item SPV.0060.010.....	49
36.	Removing Electrified Sign, BlackJack Auto Sales, Item SPV.0060.011.....	50

37.	Electrical Service Meter Breaker Pedestal Special (CB400), Item SPV.0060.012.....	50
38.	Temporary Wood Poles for Lighting, Item SPV.0060.013.....	51
39.	Temporary Luminaires and Arms, Item SPV.0060.014.....	51
40.	Inlet 5-FT Diameter, Item SPV.0060.100; Inlet 6-FT Diameter, Item SPV.0060.101; Inlet 8-FT Diameter, Item SPV.0060.102.....	52
41.	Inlet Covers Type S Special, Item SPV.0060.103.....	53
42.	Inlet Covers Flat Temporary, Item SPV.0060.104.....	53
43.	Temporary Inlet, Item SPV.0060.105.....	54
44.	Reveal Curb, Item SPV.0090.001.....	54
45.	Concrete Curb & Gutter 3-Inch Sloped 36-Inch Type R, Item SPV.0090.002.....	55
46.	Remove and Replace Vinyl Fencing, Item SPV.0090.003.....	55
47.	Temporary Aerial Cable, Item SPV.0090.004.....	55
48.	Pipe Underdrain (6-Inch) with Geotextile Fabric and Aggregate, Item SPV.0090.100.....	56
49.	Wall Modular Block Mechanically Stabilized Earth R-62-25, Item SPV.0165.001; Wall Modular Block Mechanically Stabilized Earth R-62-26, Item SPV.0165.002.....	57
50.	Pavement Cleanup Project 1646-08-72, Item SPV.0170.001.....	67
51.	Trimming Tree, Item SPV.0170.100.....	68
52.	Excavation, Hauling, and Disposal of Contaminated Soil, Item SPV.0195.001.....	68

STSP'S Revised June 29, 2023

SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 1646-08-72, C Westby, N Main Street, High Echo Lane to Locust Street, USH 14, Vernon 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 (20230629)

2. Scope of Work.

The work under this contract shall consist of removals, milling, excavation common, base aggregate, concrete pavement, HMA pavement, concrete curb and gutter, concrete sidewalk, storm sewer, erosion control, traffic control, restoration, pavement marking, permanent signing, permanent street lighting, retaining wall, restoration, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

104-005 (20090901)

3. Prosecution and Progress.

A General

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 10 calendar days before the approved start date.

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

The contract time for completion is based on an expedited work schedule and may require extraordinary forces and equipment.

Construction Staging

Stage 1

Construct temporary pavements along existing roadway.

Stage 2

Construct the westbound travel lanes, temporary widening and the northern half of the roundabout and STH 27 leg of the roundabout.

Stage 3

Construct the eastbound travel lanes and southern half of the roundabout.

Stage 4

Remove temporary pavements and construct final roadway shoulders, curb and gutter and sidewalk.

Stage 5

Construct the resurface section north of the roundabout on STH 27.

B Contractor Coordination and Advance Notification

Have a superintendent or designated representative for the prime contractor on the job site during all work operations, including periods limited to only subcontractor work operations, to serve as a primary contact person and to coordinate all work operations.

Hold progress meetings once a week. The contractor's superintendent or designated representative and subcontractor's representatives for ongoing subcontract work or subcontractor work to begin within the next two weeks are to attend and provide a written schedule of the next week(s) operations. Include begin and end dates of specific prime and subcontractor work operations. Agenda items to include review of contractor's schedule and subcontractor's schedule, evaluation of progress and pay items, and revisions if necessary. Plans and specifications for upcoming work will be reviewed to prevent potential problems of conflicts between contractors.

Based on the progress meeting, if a new revised schedule is requested by the engineer, submit it within seven calendar days. Failure to submit a new schedule within seven days shall result in the engineer holding pay requests until received.

Notify business owners and residents at least two days prior to restricting access and three days prior to closing access. Schedule sidewalk and driveway approach removal and replacement so that the time lapse between removal and replacement is minimal. See the Traffic article of these special provisions for information on residential and business property access.

Street Lighting

Maintain street lighting along USH 14 between Highland Street and Black River Avenue at all times by keeping the lighting on at least one side of the road functional with existing, temporary, or permanent lighting.

The city will be responsible for removing the existing standard light poles between Highland Street and Black River Avenue and hauling them offsite. Contact Ron Janzen, Director of Public Works, at (608) 634-3416 five days in advance of needing removals to take place.

The city is ordering decorative lighting units prior to construction that the contractor will install under the item, 'Install City Furnished Street Lighting Unit'. Contact Ron Janzen, Director of Public Works, at (608) 634-3416 to coordinate pickup of materials.

Existing RRFBs/Pedestrian Flashers

The city will be responsible for removing the existing Rectangular Rapid Flashing Beacons (RRFBs). Contact Ron Janzen, Director of Public Works, at (608) 634-3416 five days in advance of needing removals to take place. The city will reinstall the RRFBs on concrete bases installed by the contractor as noted in the project plans.

The city will be responsible for removing the existing overhead pedestrian flashers. These will be removed along with the corresponding light pole they are attached to.

C Work Restrictions

Excavation material and cleared and grubbed material shall be stockpiled on upland areas an adequate distance away from wetlands, storm sewer inlets, floodplains, and the waterways as determined by the engineer.

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

Equip vehicles with a tailgate and adequate sideboards when hauling material subject to spillage on all roadways. Use covers and/or other protective devices to prevent spillage as directed by the engineer. Immediately clean up any debris or spillage that falls onto live traffic lanes or shoulders.

Once concrete sidewalks are poured, take necessary precautions to preserve the condition of the new concrete items. Any pavement or sidewalk that is damaged shall be replaced at the contractor's expense.

Protect all building faces and overhangs from damage, dirt, and concrete. When performing work near buildings, put a shield (plywood, sheeting, etc.) up against the building to protect it. The cost of this work is included in the bid item that is being worked on at the time. The contractor is responsible for returning the building face to its original condition if any damage occurs or if any dirt or concrete has adhered to the building face.

There are several encroachments within the right-of-way that will not be altered by this project. It is the responsibility of the contractor to avoid these encroachments. The contractor is responsible for any damage to encroachments and for returning the encroachments to their original condition if any damage occurs.

When engaged in roadway cleaning operations, use equipment having vacuum or water spray mechanisms to eliminate the dispersion of particulate matter into the atmosphere. If vacuum equipment is employed, it must have suitable self-contained particulate collectors to prevent discharge from the collection bin into the atmosphere.

Existing trees, street light poles, and other utility poles are to remain in place during construction unless otherwise noted in the plan. Conduct an on-site visit prior to bidding to determine any special measures required for proper clearance between features for the paving and grading equipment.

Do not switch traffic to the next construction stage until all signing, pavement marking, traffic control devices for the stage are in place, conflicting pavement markings and signs are covered or removed, and as directed by the engineer.

Winter Shutdown

Winter shutdown will commence with the completion of Stage 3 in the Fall of 2024. Do not resume work until April 1, 2025 unless approved by the engineer. Provide a start date in writing at least 14 days prior to the planned recommencement of work in 2025. Upon approval the engineer will issue the notice to proceed within 10 days of the approved start date. If the contractor desires to complete some of the work in Stage 4 prior to the winter shutdown date, the contractor must receive written permission from the engineer prior to commencement of work.

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. Tree clearing areas specified in plans are not considered suitable summer habitat for NLEB and no tree clearing restrictions apply to those locations. 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.

Tree clearing is limited to that which is specified in the plans. 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.

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

Westby Cooperative Creamery Plant (401 S Main Street)

Coordinate with business representative (JD Greenwalt, (815) 908-0430) to schedule construction activities that will impact access along USH 13 and Bekkedal Avenue to the business. Truck deliveries need daily access to three locations within the property. The first location utilizes Bekkedal Avenue, the other two utilize the commercial driveways on USH 14 (Station 129+32 WR RT, 131+31WB RT)

Maintain access to the access along Bekkedal Avenue at all times.

Maintain access to the commercial driveway on USH 14 at Station 131+31 WB RT at all times. Construct the driveway pavement, sidewalk, and apron half at a time to maintain operations of this driveway.

Maintain access to the commercial driveway on USH 14 at Station 129+32 WB RT at all times. Provide adequate space to allow truck movements to back into the driveway for access to the loading dock, especially during grading construction operations. Coordinate a minimum of two weeks in advance for a construction window (with no access to loading dock) for five calendar days in order to construct the USH 14 concrete pavement, curb and gutter, and driveway. The concrete used to construct the pavement and driveway (sidewalk, and apron) shall be high early strength to reduce the amount of time the pavement and driveway are removed from service. The asphaltic surface behind the sidewalk will need to be replaced at a different time as a trailer must remain during the closure to provide storage for the plant. Coordinate a minimum of one week in advance for a construction window (with no access to loading dock and no trailer parked at the dock for four hours in order to construct the asphaltic surface driveway behind the sidewalk.

The plant has a sanitary discharge out of the west side of the building. Approximate locations are shown on the plan, but the contractor shall verify location and depth prior to beginning excavation activities in the area.

D Work Completion Requirements

Interim Completion and Liquidated Damages – Westby Cooperative Creamery Plant (401 S Main Street) South Driveway Apron and Sidewalk: 5 Calendar Days

Complete construction operations of Westby Cooperative Creamery Plant's south driveway to the stage necessary to reopen it to use within five calendar days. Do not reopen until completing the following work: removal of existing apron and sidewalk, grading, base course, concrete pavement, and curb and gutter. This work must be completed while the detour is in use (between June 6, 2024 – August 30, 2024).

If the contractor fails to complete the work necessary to reopen Westby Cooperative Creamery Plant's south driveway to the stage necessary to reopen it to use within five calendar days, the department will assess the contractor \$2,185 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on the sixth day. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

Interim Completion and Liquidated Damages – USH 14 (Coon Prairie Avenue to Black River Avenue): August 30, 2024

Complete construction operations on USH 14 between Coon Prairie Avenue and Black River Avenue to the stage necessary to reopen it to bidirectional through traffic by August 30, 2024. Do not reopen until completing the following work: grading, base course, concrete pavement, curb and gutter, sidewalk, pavement marking, signing, and permanent lighting. Work may not begin within these limits of USH 14 until June 6, 2024.

If the contractor fails to complete the work necessary to reopen USH 14 between Coon Prairie Avenue and Black River Avenue to traffic by August 30, 2024, the department will assess the contractor \$2,185 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on August 31, 2024. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

Interim Completion and Liquidated Damages – USH 14/STH 27 Stage 3 (Winter Shutdown): November 27, 2024

Complete construction operations of Stage 3 on USH 14/STH 27 to the stage necessary to reopen it to bidirectional through traffic on permanent pavement by November 27, 2024. Do not reopen until completing the following work: grading, base course, concrete pavement, curb and gutter (except that which is noted to be completed in Stage 4), sidewalk (except that which is noted to be completed in Stage 4), permanent lighting, permanent marking, and permanent signing that is not being constructed in Stage 4.

If the contractor fails to complete the work necessary to reopen USH 14/STH 27 to traffic on permanent pavement by November 27, 2024, the department will assess the contractor \$2,185 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 12:01 AM on November 28, 2024. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

4. Traffic.

A General

Submit to the engineer for approval a detailed traffic control plan for any changes to the proposed as shown in the plans. Submit the plan 14 days prior to the intended use. A request does not constitute approval.

Do not switch traffic to the next construction stage until all signing, pavement marking and traffic control devices for the stage are in place, conflicting markings and signs are covered or removed.

Place traffic control drums and other temporary traffic control devices on the outer edge of the shoulder when not in use.

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

- All construction vehicles and equipment entering or leaving the live traffic lanes shall yield to all through traffic.
- Equip all vehicles and equipment entering or leaving the live traffic lanes with a hazard identification beam (yellow flashing signal) capable of being visible on a sunny day when viewed without the sun directly on or behind the device from a distance of 1,000 feet. Activate the beam when merging into or exiting a live traffic lane.
- Do not deliver or store materials and equipment within open travel lanes during any stage of construction.

Place Portable Changeable Message Signs (PCMS) on USH 14/61 and STH 27 at the begin and end construction limits seven calendar days prior to construction notifying motorists when work is to start. See locations and messages in the plan.

Do not open a roundabout to circulatory traffic until all temporary or permanent lights within the roundabout are operational.

USH 14/61 and STH 27 is an oversized-overweight (OSOW) route. Advanced width restriction signing must be in place prior to the start of Stage 2 construction.

Mobile flagging operations shall be utilized to complete the asphalt pavement and pavement marking operations.

Have available at all times during working hours sufficient experienced personnel to promptly install, maintain, remove and reinstall the required traffic control devices to safely route traffic.

Access to businesses and residences shall be maintained throughout the project. Stage driveway and sidewalk construction as needed to maintain access or coordinate any closures with the affected property owner.

Maintain minimum lane widths as shown on the plans.

Wisconsin Lane Closure System Advance Notification

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

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16 feet)	MINIMUM NOTIFICATION
Lane and shoulder closures	7 calendar days
Full roadway closures	7 calendar days
Ramp closures	7 calendar days
Detours	7 calendar days

Closure type without height, weight, or width restrictions (available width, all lanes in one direction \geq 16 feet)	MINIMUM NOTIFICATION
Shoulder Closures	3 calendar days
Lane closures	3 business days
Ramp closures	3 business days
Modifying all closure types	3 business days

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

Enter a length restriction of 75 feet into the LCS for the duration of Stage 2, Stage 3, and Stage 4.

Coordinate with the Westby Area School District to provide school bus access. Notify the Westby Area School District two weeks prior to construction. Also notify them one week prior to traffic switches and closures.

Coordinate with the Westby Post Office to provide access for mail delivery.

Coordinate with the City of Westby to provide access for garbage collection.

Notification of Emergency and Local Officials

Notify the following parties at least 3 days (72 hours) in advance of any traffic change:

- Wisconsin State Patrol
- Vernon County Sheriff's Department
- Vernon County Highway Department
- Westby-Christiana Fire District
- Westby Police Department
- City of Westby

B Traffic Operations

Stage 1

Traffic to use existing roadways, construction to be done utilizing shoulder closures and lane shifts. Pedestrians to use path on west side of roadway from project beginning to South Street, then cross USH 14 and use the east sidewalk until Coon Prairie Avenue. A signed pedestrian detour will be required between Station 126+00 and Station 165+75, using existing sidewalk along Melby Street and Ramsland Street.

Stage 2

Eastbound traffic to utilize the existing eastbound travel lane and temporary widened pavement area. Westbound traffic to utilize one-way detour, along Coon Prairie Road and Bekkedal Avenue, to allow for one-way only eastbound traffic within the downtown area. The traffic control (stop sign) at the Bekkedal and State Street intersection will be reversed from its current condition to allow detour traffic to proceed without stopping. The one-way eastbound traffic within the detour/downtown area will travel along the east side shoulder/parking lane while the westbound travel lane and shoulder are constructed.

USH 14/61 traffic at the STH 27 intersection will run within the existing roadway.

STH 27 traffic to utilize temporary travel lanes along the western side of the roadway during substage 2A, while the northbound lane of the STH 27 leg and temporary pavements are constructed. Once stage 2A is complete, substages 2B and 2C can be started. For stage 2B and 2C, STH 27 traffic will utilize the new northbound travel lane and temporary widening constructed in stage 2A along the eastern side of the roadway. The southbound lane of STH 27 shall be constructed.

Sideroads will remain open to traffic except when closure is necessary to construct the sideroad improvements. Do not close consecutive intersections at the same time so that local access can be maintained.

Pedestrians to use path on west side of roadway from project beginning to South Street, cross USH 14 and use the east sidewalk until Maple Street, then cross USH 14 and use the west sidewalk until Melby Street. A signed pedestrian detour will be required between Station 126+00 and Station 165+75, using existing sidewalk along Melby Street and Ramsland Street.

Stage 3

Traffic to utilize the newly constructed westbound travel lane and temporary widened pavement area. Westbound traffic will continue to use the one-way detour on Coon Prairie Road and Bekkedal Avenue. The traffic control (stop sign) at the Bekkedal and State Street intersection will be reversed from its current condition to allow detour traffic to proceed without stopping. Eastbound traffic within the detour/downtown area will switch to travel along the newly constructed westbound travel lane and shoulder while the eastbound lane and shoulder are constructed.

USH 14/61 traffic at the STH 27 intersection will travel on the newly constructed northern portion of the roundabout. Traffic will then utilize the newly constructed Frontage Road and temporary travel lanes to merge back onto the existing USH 14/61 roadway outside of the work area.

STH 27 traffic will utilize the final northbound/southbound travel lanes of the STH 27 leg of the roundabout.

Sideroads will remain open to traffic except when closure is necessary to construct the sideroad improvements. Do not close consecutive intersections at the same time so that local access can be maintained.

Pedestrians to use new southbound lanes from project beginning to South Street, use the west sidewalk until Coon Prairie Avenue, then cross USH 14 and use the east sidewalk until Melby Street. A signed pedestrian detour will be required between Station 126+00 and Station 165+75, using existing sidewalk along Melby Street and Ramsland Street.

Winter Shutdown

Traffic on USH 14/61 will use permanent travel lanes after all work has been completed in previous stages. Pedestrians to use new concrete sidewalks.

Stage 4

Traffic to utilize the final mainline travel lanes, while the last of the temporary pavements are removed and final curb and gutter and sidewalk are constructed. The one-way detour will no longer be used, two-way traffic will be maintained throughout the downtown area.

At the roundabout traffic to utilize the permanent lanes, remaining work with the central roundabout area to be done under flagging.

After completion of the east sidewalk between South Street and Coon Prairie Avenue, pedestrians to use new east sidewalk while west sidewalk is constructed. East sidewalk from Black River Avenue to Ramsland Street will be closed and pedestrians to use east sidewalk.

Stage 5

Traffic on USH 14/61 will use permanent travel lanes after all work has been completed in previous stages. Complete the resurfacing section of STH 27 under flagging operations. Flagging both legs of USH 14/61 prior to entering the roundabout may be required to prevent traffic backups within the intersection.

C Residential and Business Property Access

Maintain vehicular access at all times to all driveways, parking lots, public alleys, and side roads throughout construction; except during paving and utility installation operations occurring in the immediate vicinity of the access location. Maintain and keep open access locations, where alternative access is not available at all times by closing one driveway at a time, building half the driveway at a time and/or plating concrete work. Plating of concrete work, as directed by the engineer, is incidental to the item requiring the plating. When an access or parking area must be limited due to construction operations, notify the engineer, property owners, and occupants of the premises at least two days prior to the beginning of the construction operation. Complete the work in a reasonable time and manner to resume access to the driveway or side road. In parking lots that are being reconstructed, stage operations so that parking and access is maintained on existing or proposed base aggregate or pavement.

Coordinate with each business for the best time to construct driveways and sidewalks so as to minimize impacts to business operations during open hours.

Maintain emergency vehicle access and delivery vehicle access at all times to all properties throughout construction; except during paving and utility installation operations occurring in the immediate vicinity of the property. When access must be limited due to construction operations, notify the police and fire departments, the engineer and property owners and occupants at least two days prior to the beginning of the construction operation. Complete the work in a reasonable time and manner to resume access to the property.

For vehicle access, furnish, construct, and maintain a ramp of compacted base aggregate dense between closed side streets or open cross streets or driveway access and the work zone at all times, including down to excavated subgrade. The maximum ramp slope shall be 12% and delineated with traffic control drums. Use drums, barricades, flexible tubular markers, and safety fence to direct vehicular traffic in the work zone if required by the engineer. Protect and delineate hazards such as open excavations, abrupt drop-offs, and exposed manholes, inlets, and hydrants, with wedged material, drums, barricades, and safety fence as shown in the plans, special provisions, or as directed by the engineer.

D Pedestrian Access

Provide pedestrian access according to current Americans with Disabilities Act Accessibility Guidelines (ADAAG). Maintain ADAAG accessible pedestrian access surfaces and walkways that are free from mud, sand, and construction debris within the project limits where existing pedestrian facilities are located by means of existing sidewalk, Temporary Pedestrian Surface bid items, Temporary Pedestrian Curb Ramp bid item, or new sidewalk at a minimum width of 4 feet. Gravel or base course material are not acceptable. Preserve the existing sidewalk as long as practicable to maintain pedestrian access. Provide temporary pedestrian access as detailed in the plans and as directed by the engineer. Place Temporary Pedestrian Barricade as shown in the plans and as directed by the engineer. When required as shown in the plans, close sidewalks according to the standard detail drawing "Traffic Control, Pedestrian Accommodation."

Furnish and install Temporary Pedestrian Barricade along existing and temporary sidewalk surface where there are drop-offs greater than 6 inches within 1 foot of the sidewalk edge and a grass or turf buffer does not exist to delineate the edge of sidewalk for vision impaired pedestrians.

Traffic control drums or barrels shall not be used for guidance along pedestrian access routes.

If additional special pedestrian access needs are identified along the project, provide for that access as directed by the engineer.

USH 14 (South Street/Storsveen Street to 2nd Street) and (Black River Avenue to STH 27)

Closures of sidewalk must be approved by the engineer and be limited to one-side of the street at a time to maintain pedestrian access along USH 14.

Provide a single temporary crosswalk at every other intersection to allow pedestrian passage across the USH 14 work zone at all times.

USH 14 (2nd Street to Black River Avenue)

Maintain an ADA accessible pedestrian access, 6 foot wide desirable, 4 foot minimum, on either the existing sidewalks or a temporary sidewalk surface to all business and residential entrances for as long as possible along both sides of USH 14 through the work zone and connections to the existing side street sidewalk network. The contractor may use the existing sidewalk along the building face or may provide a temporary surface along the faces of the buildings for pedestrian access, while the majority of the internal roadway part of the project is completed. Provide protection from any drop-off exceeding 6 inches and install a Temporary Pedestrian Barricade between the pedestrian access and the work zone.

When the remaining sidewalks need to be removed for replacement, the contractor shall have the base course material leveled and compacted in the removal areas within 24 hours, and the new concrete sidewalk must be in place and available for pedestrian use within 72 hours of removal. The contractor will only be allowed to remove the sidewalk on one side of the street at a time.

If a business or residence does not have another entrance that can be used during the placement of the new concrete sidewalk, the contractor must provide a temporary pedestrian surface to bridge over the new concrete to the entrance until the new concrete has sufficient strength to carry pedestrian traffic without being damaged.

Provide a single temporary crosswalk at both the 2nd Street intersection and State Street intersection to allow pedestrian passage across the USH 14 work zone at all times.

While parking is prohibited on USH 14 downtown during Stage 2 and Stage 3, businesses will direct customers to utilize the existing city parking lot along Bekkedal Avenue between 2nd Street and 1st Street. Provide pedestrian accommodations across the detour route to the downtown businesses.

5. 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 USH 14 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, May 17, 2024 to 6:00 AM Monday, May 20, 2024 for Syttende Mai;
- From noon Friday, May 24, 2024 to 6:00 AM Tuesday, May 28, 2024 for Memorial Day;
- From noon Friday, June 28, 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;
- From noon Friday, November 22, 2024 to 6:00 AM Monday, November 25, 2024 for Deer Hunting;
- From noon Wednesday, November 27, 2024 to 6:00 AM Monday, December 2, 2024 for Thanksgiving Day;
- From noon Friday, April 18, 2025 to 6:00 AM Monday, April 21, 2025 for Easter;
- From noon Friday, May 16, 2025 to 6:00 AM Monday, May 19, 2025 for Syttende Mai;
- From noon Friday, May 23, 2025 to 6:00 AM Tuesday, May 27, 2025 for Memorial Day.

stp-107-005 (20210113)

6. Utilities.

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

stp-107-065 (20080501)

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

Underground and overhead facilities are located within the project limits. Utility adjustments are required for this construction project as noted below. Coordinate construction activities with a call to Diggers Hotline or a direct call to the utilities that have facilities in the area as required per statutes. Use caution to ensure the integrity of underground facilities and maintain code clearances from overhead facilities always. The contractor shall have all buried utilities field located prior to the start of construction. Contact each utility company listed in the plans, prior to preparing bids, to obtain current information on the status of existing and any new utility relocation work.

Mediacom Wisconsin LLC has overhead facilities at the following locations:

- USH 14 along the east side from the start of the project to Highland Street
- South Street/Storsveen Street along the south side and crossing
- USH 14 along the east side from Black River Avenue to Park Street
- Park Street along the south side
- Crossing USH 14 at Station 166+81 WB
- USH 14 along the northeast side from Ramsland Street to High Echo Lane

Mediacom Wisconsin LLC (Communication) has underground facilities at the following locations:

- USH 14 along the southwest side from Ramsland Street and continuing northwest to the project limits.

Mediacom Wisconsin LLC will relocate existing aerial facilities outside of the project limits prior to construction at the following locations:

- Station 103+75 WB to Station 128+00 WB
- Station 149+00 WB to Station 153+00 WB

Mediacom Wisconsin LLC will relocate existing aerial crossing at Station 166+80 WB underground and remove the existing pole prior to construction.

Midwest Natural Gas has underground facilities at the following locations:

- USH 14 along the west side from the BOP to Highland Street
- Crossing of USH 14 at Station 93+66 WB
- Stenslien Street along the north side
- Crossing of USH 14 at Station 103+68 WB
- Crossing of Spruce Street
- Storsveen Street along the south side and crossing
- South Street along the north side
- Crossing of USH 14 at Station 110+09 WB
- USH 14 along the east side from Walnut Street to Station 118+30 WB
- Crossing of USH 14 at Station 117+72 WB
- Crossing of USH 14 at Station 119+46 WB and continuing along the north side of Coon Prairie Avenue
- USH 14 along the east side from Coon Prairie Avenue to Station 120+70 WB
- Crossing of USH 14 at Station 122+44 WB
- Crossing of USH 14 at Station 125+17 WB
- Maple Street along the north side
- Highland Street along the south side, and crossing USH 14
- USH 14 along the east side from Highland Street to Station 132+27 WB
- USH 14 along the west side from Station 145+11 WB to Park Street
- Crossing of USH 14 at Station 148+85 WB
- Crossing of Black River Avenue
- Park Street along the south side
- Washington Street along the south side
- STH 27 along the south side from USH 14 to EOP
- Ramsland Street along the northwest side
- Crossing to USH 14 at Station 166+63 WB
- USH 14 along the east side from STH 27 to EOP
- Swiggum Road along the east side
- STH 27 along the north side, beginning east of Swiggum Road

Midwest Natural Gas will remove existing facility crossings prior to construction at the following locations:

- Station 103+60 WB
- Station 119+45 WB
- Station 130+60 WB

Midwest Natural Gas will eliminate existing service at Station 148+80 WB prior to construction.

Midwest Natural Gas will eliminate existing service to 415 Main St (Station 163+25 EB to 166+25 EB) prior to construction.

Midwest Natural Gas will move and/or replace existing facilities out of conflict prior to construction at the following locations:

- Station 99+50 WB to Station 101+25 WB LT
- Station 107+75 WB to Station 130+55 WB LT
- Station 145+00 WB to Station 149+00 WB LT
- Station 152+50 WB
- Station 166+43 WB

Midwest Natural Gas will adjust underground crossing facilities to avoid conflicts with the new storm sewer during construction. Midwest Natural Gas anticipates needing 1 day to complete the adjustment. Notify Midwest Natural Gas as described above for the following locations:

- Station 91+43 WB
- Station 94+14 WB
- Station 110+10 WB
- Station 122+40 WB
- Station 125+18 WB

Midwest Natural Gas will adjust the valve at Station 129+77 WB LT to the new grade. Midwest Natural Gas anticipates needing 1 day to complete the adjustment. Notify Midwest Natural Gas as described above.

Vernon Communications Coop has underground telephone facilities at the following locations:

- USH 14 along the east side from Station 90+21 WB to Station 142+10 WB
- USH 14 along the west side from Station 91+38 WB to Majestic Drive
- Crossing of USH 14 at Station 93+56 WB
- Spruce Street along the north side
- Crossing of USH 14 at Station 106+96 WB
- Crossing of South Street
- Crossing of USH 14 at Station 121+60 WB
- Crossing of USH 14 at Highland Street
- Highland Street along the south side
- Crossing of 2nd Street
- Crossing of USH 14 at Station 142+10 WB
- USH 14 along the west side from Station 142+07 WB to Station 142+94 WB
- USH 14 along the east side from Station 143+07 WB to EOP
- Crossing of USH 14 at Station 147+03 WB
- Crossing USH 14 at Station 154+45 WB
- STH 27 along the north side from USH 14 to Station 52+86 SB

Vernon Communications Coop (Communication) has underground fiber optic facilities at the following locations:

- N Ramsland Street along the west side
- USH 14 along the east side from STH 27 to N Ramsland Street
- STH 27 along the north side from USH 14 to EOP
- STH 27 along the south side

Vernon Communications Coop will relocate existing fiber from Park Street to High Echo Lane outside of the project limits. Facilities will be relocated to run along Black River Avenue. Vernon Communications Coop will relocate these facilities prior to construction.

Vernon Communications Coop will plate handholes during construction at the locations listed below. These handholes will need to be plated before the temporary asphalt gets constructed. Vernon Communications Coop anticipates needing 1 day to plate each of the following handhole locations:

- Station 106+95 WB RT
- Station 109+70 WB RT
- Station 113+96 WB RT
- Station 119+08 WB RT
- Station 149+05 WB RT
- Station 153+02 WB RT

Vernon Communications Coop will replace handholes during construction at the locations listed below. These handholes will need to be replaced after the existing sidewalk is removed and before the new sidewalk is poured. Vernon Communications Coop anticipates needing 1 day to replace the following handhole locations:

- Station 106+95 WB RT
- Station 109+70 WB RT
- Station 113+96 WB RT
- Station 119+08 WB RT
- Station 121+59 WB RT
- Station 125+11 WB RT
- Station 130+70 WB RT
- Station 133+09 WB RT
- Station 137+02 WB RT
- Station 141+92 WB RT
- Station 146+26 WB RT
- Station 149+05 WB RT
- Station 153+02 WB RT

Vernon Communications Coop will rebuild their manhole at Station 142+06 WB LT. Vernon Communications Coop anticipates needing 5 days to replace the manhole. Notify Vernon Communications Coop as described above.

Westby Electric & Water Utility (Electric) has underground facilities at the following locations:

- Spruce Street along the north side
- USH 14 along the west side from Station 132+07 WB to Station 144+50 WB
- USH 14 along the east side from Station 132+81 WB to Station 145+50 WB
- 2nd Street East along the south side

- 1st Street along the south side
- State Street along the south side
- USH 14 along the east side from Station 154+20 WB to Station 152+42 WB
- USH 14 along the west side from Station 160+86 WB to Ramsland Street
- Crossing of N Ramsland Street
- STH 27 along the north side from Station 55+63 SB to EOP
- Crossing of Swiggum Street

Has overhead facilities at the following locations:

- USH 14 along the east side from Station 90+10 WB to Station 131+75 WB
- Crossing of USH 14 at Station 94+63 WB
- Crossing of USH 14 at Station 97+97 WB
- Crossing of USH 14 at Station 100+81 WB
- Crossing of USH 14 at Station 107+08 WB
- Several crossings of USH 14 from South Street/Storsveen Street to Highland Street
- USH 14 along the east side from 325' south of Black River Avenue to Park Street
- Park Street along the south side
- Several crossings of USH 14 from Station 147+30 WB to Station 151+10 WB
- Crossings of Washington Street
- USH 14 along the east side from STH 27 to EOP
- Crossing of USH 14 at Station 165+59 WB
- Ramsland Street along the west side to the north side of USH 14
- Crossing of USH 14 at Station 176+12 WB
- STH 27 along the north side from USH 14 to Station 53+84 SB
- Crossing of STH 27 at Station 53+84 SB
- STH 27 along the south side

Westby Electric & Water Utility (Electric) will remove their existing wood poles at the following stations prior to construction:

- Station 108+34 RT
- Station 110+81 RT
- Station 111+32 LT
- Station 112+74 RT
- Station 115+28 LT
- Station 115+43 RT
- Station 116+73 RT
- Station 116+78 LT
- Station 117+99 LT
- Station 118+04 RT
- Station 175+84 LT

Westby Electric & Water Utility (Electric) will move their existing poles and attached aerial facilities at the following stations prior to construction:

- Station 129+43 LT
- Station 148+97 RT
- Station 150+14 RT
- Station 151+31 RT
- Station 165+92 LT

Westby Electric & Water Utility (Electric) will move their existing poles and attached aerial facilities at the following stations during construction:

- Station 100+78 LT
- Station 131+75 RT
- Station 152+48 RT
- Station 153+04 RT
- Station 154+18 RT
- Station 156+44 LT
- Station 168+29 RT

Notify Westby Electric & Water Utility (Electric) as described above.

Westby Electric & Water Utility (Electric) will remove their existing poles at the following stations during construction:

- Station 107+88 LT
- Station 109+62 RT
- Station 111+67 RT
- Station 113+96 RT
- Station 119+03 RT
- All lighting poles from Station 132+07 - Station 145+56
- Station 157+46 RT
- Station 161+97 LT
- Station 165+60 LT
- Station 172+74 RT
- Station 52+75 LT

Notify Westby Electric & Water Utility (Electric) as described above.

Westby Electric & Water Utility (Electric) will remove the lighting units on existing wood poles (poles to remain) at the following stations during construction:

- Station 126+02 RT
- Station 128+58 RT
- Station 131+07 RT
- Station 147+09 LT
- Station 148+97 RT
- Station 150+14 RT
- Station 152+48 RT

Notify Westby Electric & Water Utility (Electric) as described above.

Westby Electric & Water Utility (Sewer) has underground facilities at the following locations:

- USH 14 along the east side from Station 90+04 WB to Station 109+89 WB
- Majestic Drive along the north side
- USH 14 along the west side from Majestic Drive to Station 115+08 WB
- Stenslien Street along the south side
- Crossing of Locust Street
- South Street along the centerline
- Storsveen Street along the centerline
- USH 14 along the centerline from Station 115+08 WB to Black River Avenue
- Coon Prairie Avenue along the centerline
- Maple Street along the centerline
- Highland Street along the south side and crossing USH 14
- East 2nd Street along the centerline
- 1st Street along the centerline
- Crossing of USH 14 southbound lanes at Station 137+94 WB
- State Street along the centerline
- USH 14 along the west side from Black River Avenue to Station 160+93 WB
- W Park Street along the centerline
- Washington Street along the centerline
- Ramsland Street along the centerline
- Crossing of USH 14 at Station 166+24 WB
- USH 14 along the east side from Ramsland Street to EOP
- High Echo Lane along the centerline

Westby Electric & Water Utility (Sewer) has sanitary sewer manholes that will be adjusted by the contractor during construction. Construct as shown in the plans and in the bid items for this project under 'Adjusting Sanitary Manholes, Item SPV.0060.001.'

Westby Electric & Water Utility (Sewer) has sanitary cleanout frost sleeves that will be adjusted by the contractor during construction. Construct as shown in the plans and in the bid items for this project under 'Adjusting Sanitary Cleanout Frost Sleeve, Item SPV.0060.002.'

Westby Electric & Water Utility (Water) has underground facilities at the following locations:

- USH 14 along the west side from Station 87+43 WB to Station 93+54 WB
- USH 14 along the east side from Station 88+91 WB to Station 160+92 WB
- Majestic Drive along the south side and down the center line
- Crossing USH 14 at Station 100+37 WB
- Stenslien Street along the center line
- Storsveen Street along the south side
- South Street along the north side
- Several lateral crossings of USH 14 from Station 109+23 WB to Station 155+93 WB
- Coon Prairie Avenue along the south side
- Maple Street along the north side

- Highland Street along the north side
- 2nd Street along the north side with crossings
- 1st Street along the north side
- W State Street along the centerline with crossings
- W Park Street along the south side
- E Park Street along the centerline
- Washington Street along the north side with crossings
- USH 14 along the west side from Washington Street to Station 157+91 WB
- USH 14 along the east side from Ramsland Street to High Echo Lane
- Crossing of USH 14 at Ramsland Street
- Crossing of USH 14 at Station 169+24 WB
- STH 27 along the south side from USH 14 to Station 56+52 NB

Westby Electric & Water Utility (Water) has hydrants that will be removed by the contractor during construction. Remove as shown in the plans and in the bid items for this project under 'Hydrant Removal, Item SPV.0060.003.'

Westby Electric & Water Utility (Water) has water valves that will be removed by the contractor during construction. Remove as shown in the plans and in the bid items for this project under 'Valve Removal, Item SPV.0060.004.'

Westby Electric & Water Utility (Water) has water valves that will be adjusted by the contractor during construction. Construct as shown in the plans and in the bid items for this project under 'Adjusting Water Valves, Item SPV.0060.007.'

Westby Electric & Water Utility (Water) has curb boxes that will be adjusted by the contractor during construction. Construct as shown in the plans and in the bid items for this project under 'Adjusting Water Service Curb Box, Item SPV.0060.008.'

7. **Hauling Restrictions.**

At all times, conduct operations in a manner that will cause a minimum of inconvenience to the free flow of traffic on roadways carrying USH 14 and STH 27 traffic.

Use only City of Westby designated truck routes for material haul roads. Haul roads are detailed in standard spec 618.

8. **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 Jay Adams at (608) 785-9027. Post the permit certificate in a conspicuous place at the construction site.

stp-107-056 (20230629)

9. Notice to Contractor – Electrical/Lighting General.

Notify the Department's Electrical Field Unit at (608) 785-9080 and the City of Westby Director of Public Works, Ron Janzen (608) 632-2738 at least three (3) weeks prior to the beginning of the Electrical work. The Department's Regional Electrical personnel will perform the inspections.

Electrical item inspections are required at the following times: after the staking of all electrical underground items, islands, curb and gutter, and medians; before the pouring of all lighting and cabinet bases; before cable and wire are pulled; during field terminations at the lighting bases; and prior to the installation of any poles or other above ground electrical items.

Request electrical inspections of the completed lighting work to the project engineer and contact the Department's Electrical Field Unit at (608) 785-9080 and the City of Westby Director of Public Works, Ron Janzen (608) 632-2738 at least five working days prior to the time of the requested inspection.

Contractor shall maintain the pre-winter permanent lighting and temporary lighting systems during the winter shut-down at the STH 27 roundabout. Maintenance includes, but is not limited to:

- Installing temporary aerial cable.
- Installing temporary street lights.
- Replacement of burned out lamps.
- Replacement of knocked down poles.
- Maintaining continuous lighting for the duration of the project.

Supply an off-hours contact(s) for repair purposes. Respond within 1 hour to the project site for knockdowns or other work that must be completed in a timely manner. Provide the name, address, and telephone number(s) of the persons qualified and assigned to maintaining the temporary lighting to the engineer and local police. Ensure the persons are available 24 hours a day, 7 days a week, from the start of the project through completion. Ensure that emergency calls are received by an individual and not by an answering machine. Complete all other maintenance needs within 6 hours of notification.

Continuously monitor the existing and temporary lighting systems until construction is complete.

10. Coordination with Businesses and Residents.

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

stp-108-060 (20141107)

11. Public Convenience and Safety.

Revise standard spec 107.8(6) as follows:

Check for and comply with local ordinances governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 10:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer.

stp-107-001 (20060512)

12. Health and Safety Requirements for Workers Remediating Petroleum Contamination.

Add the following to standard spec 107.1(2):

Soil contamination with gasoline, diesel fuel, fuel oil, or other petroleum related products may be encountered during excavation activities. Prepare a site-specific Health and Safety Plan complying with the Occupational Safety and Health Administration (OSHA) standard for Hazardous Waste Operation and Emergency Response (HAZWOPER), 29 CFR 1910.120.

All site workers taking part in remediation activities or who will have the reasonable probability of exposure of safety or health hazards associated with the hazardous material shall have completed Health and Safety training that meets OSHA requirements. Before the start of remediation work, submit to the engineer a site-specific Health and Safety Plan, and written verification that workers will have completed up-to-date OSHA training.

Develop, delineate, and enforce the health and safety exclusion zones for each contaminated site location pursuant to 29 CFR 1910.120.

stp-107-115 (20150630)

13. Concrete Pavement Gaps.

Concrete Pavement Gaps are identified in the plans at each colored crosswalk location, to perform the necessary concrete pavement construction operations, as determined by the contractor, to complete the colored crosswalks.

14. Trenching.

A Description

This special provision describes excavating trenches for utilities and storm sewer system components as shown on the plans, directed by the engineer, and as hereinafter provided.

B Materials

Fill materials shall conform to the requirements of the Backfill section in these Special Provisions.

C Construction

C.1 Preparation

Perform all work as described herein. If an item is not clearly specified, refer to standard spec 205.

Installer: Company specializing in performing work of this section with minimum one year of documented experience.

Verify work associated with lower elevation utilities is complete before placing higher elevation utilities.

Protect utilities indicated to remain from damage.

Protect plant life (trees, shrubs, flowers, etc.), lawns, fields, and other features remaining as portion of final landscaping.

Protect benchmarks, survey control points, existing structures, fences, sidewalks, paving, curbs, and other items to remain from excavating equipment and vehicular traffic.

Maintain and protect above and below grade utilities indicated to remain.

Establish temporary traffic control and detours when trenching is performed in public right-of-way.

Relocate traffic controls and reroute traffic as required during progress of Work. Contractor to use the Manual of Uniform Traffic Control Devices (MUTCD) as their guideline.

C.2 Lines and Grades

Lay pipes to lines and grades indicated on Drawings.

- Engineer reserves right to make changes in lines, grades, and depths of utilities when changes are required for Project conditions.

Use laser-beam instrument(s) with qualified operator to establish lines and grades.

If laser-beam instrument(s) are not used, maintain grade alignment of pipe using string line parallel with grade line and vertically above centerline of pipe.

- Establish string line on level batter boards at intervals of not more than 25-feet.
- Install batter boards spanning trench, rigidly anchored to posts driven into ground on both sides of trench.
- Set three adjacent batter boards before laying pipe to verify grades and line.
- Determine elevation and position of string line from elevation and position of offset points or stakes located along pipe route.
- Do not locate pipe using side lines for line or grade.

C.3 Installation

When encountering existing utilities, perform excavation according to the utility's requirements.

Do not advance open trench more than 200-feet ahead of installed pipe, unless otherwise permitted by the engineer. Provide construction fence barricades around open trenches and pits when unattended.

Do not leave more than 25-feet of trench open at end of working day.

Cut trenches sufficiently wide to enable installation and allow inspection. Remove water or materials that interfere with work.

Excavate bottom of trenches a maximum 24-inches wider than outside diameter of pipe.

Excavate trenches to depth indicated on drawings. Verify that trench is excavated deep until not only for the pipe, but for the pipe bedding also. Provide uniform and continuous bearing and support for bedding material and pipe.

When project conditions permit, slope side walls of excavation starting 2-feet above top of pipe. When side walls cannot be sloped, provide sheeting and shoring to protect excavation as specified in this section.

When subsurface materials at bottom of trench are loose or soft, notify engineer, and request instructions.

Cut out soft areas of subgrade not capable of compaction in place. Backfill with granular fill as per the Backfill section in these Special Provisions and compact to density equal to or greater than requirements for subsequent backfill material.

Trim excavation. Hand trim for bell and spigot pipe joints. Remove loose matter.

Correct areas over excavated areas with compacted backfill as specified for authorized excavation or replace with fill concrete as directed by the engineer.

Remove excess subsoil not intended for reuse, from site.

Wet Trench Conditions:

- Contractor shall attempt to dispose of ground water or surface drainage entering trench by employing ordinary dewatering techniques such as the use of sump pumps, sump pits adjacent to pipe alignment, dikes, and similar methods. Dispose of, or divert, water along existing drainage ways. Do not place water so that it ponds on roadway subgrade or adjacent private property. Do not directly discharge water into a stream, river, pond, or lake.
- Allowing water to flow into the pipe being laid will not be permitted, except for storm sewer, after joints have been set. Install temporary plug on upper end of pipe if there is danger of sand or debris being washed into pipe.
- When trench bottom is unstable because of ground water, the engineer may require extra excavation to remove the unstable material. Provide washed stone foundation followed by granular bedding as per the Backfill section in these Special Provisions.

Well Point and Deep Well Dewatering:

- Where in the opinion of the engineer or contractor, the trench or excavation pit cannot be kept dry by ordinary dewatering techniques, install a well point or deep well system to effectively dewater the trench or pit.

- If dewatering wells are approved, they shall be drilled, maintained, and abandoned according to the requirements of the Wisconsin Department of Natural Resources (WDNR). For dewatering wells that have a single or aggregate capacity of greater than 70 gpm, contractor must obtain a well permit from the WDNR, Private Water Supply Section, Box 7921, Madison, Wisconsin 53707.

Reshape and re-compact fills subjected to vehicular traffic during construction. Provide access to residential, commercial, and industrial properties if an alternate access is not available by the end of each working day.

C.4 Sheeting and Shoring

Sheet, shore, and brace excavations to prevent danger to persons, structures, and adjacent properties and to prevent caving, erosion, and loss of surrounding subsoil.

Support trenches more than 5 feet deep excavated through unstable, loose, or soft material. Provide sheeting, shoring, bracing, or other protection to maintain stability of excavation.

Design sheeting and shoring to be removed at completion of excavation work.

Repair damage caused by failure of the sheeting, shoring, or bracing and for settlement of filled excavations or adjacent soil.

Repair damage to new and existing work from settlement, water or earth pressure or other causes resulting from inadequate sheeting, shoring, or bracing.

D (Vacant)

E Payment

All trenching is incidental to the sanitary sewer system, water distribution system, and other utility installations.

15. Backfill.

A Description

This special provision describes bedding and backfilling of all trenches for sanitary sewer system and water distribution system as shown on the plans, directed by the engineer, and as hereinafter provided.

B Materials

Materials Source: Submit name of imported fill materials' suppliers.

B.1 Subsoil Fill

As per standard spec 207, Embankment and standard spec 208, Borrow. Material used shall be free of organic matter, debris, frozen soils, ice, and other objectionable materials.

B.2 Granular Backfill

As per standard spec 209, the gradation of material passing the No. 4 Sieve may be either Grade 1 or Grade 2 material as per standard spec 209.2.2.

B.3 Washed Stone

Clean, hard, tough, and durable 1 ½-inch washed stone, crushed rock, crushed gravel, or gravel free from fines and adherent coatings.

C Construction

Verify structural ability of unsupported walls to support loads imposed by fill.

Prepare subgrade according to standard spec 205.

Compact subgrade to density requirements for subsequent backfill materials.

Cut out soft areas of subgrade not capable of compaction in place. Backfill with granular fill and compact to density equal to or greater than requirements for subsequent fill material.

When applicable, proof roll to identify soft spots; fill and compact to density equal to or greater than requirements for subsequent fill material.

C.2 Bedding and Initial Backfilling

Bedding, haunching, and initial backfill for rigid pipes shall be according to ASTM C12, Class C or better. Bedding, haunching, and initial backfill for flexible pipes shall be according to ASTM D-2321, Class II or better.

Provide 6-inches of compacted granular material for bedding. Haunches to be supported by compacted granular material. Initial backfilling, that backfill which is placed from the top of the pipe to 12-inches above, shall be compacted granular material.

Provide a minimum of 12-inches of compacted granular material for backfilling around all sides of all catch basins, inlets, manholes, and other storm water structures.

In all cases, contractor to follow manufacturer's recommendation for bedding.

C.3 Backfilling

Backfill trenches to the subgrade elevation.

Place material in continuous layers as follows:

- Subsoil (Natural) Fill: Maximum 12-inches compacted depth.
 - Compact to 90% of maximum density as determined by ASTM D-1557.
 - Subsoil Fill shall only be used as backfill material when not located under a roadway, parking lot, future roadway, or structure.
- Granular Fill: Maximum 6-inches compacted depth.
 - Compact to 95% of maximum density as determined by ASTM D-1557.

Employ placement method that does not disturb or damage other work.

- In no case shall backfill material be dropped from such a height or in such a volume that its impact will cause dislocation or damage to piping.

Maintain optimum moisture content of backfill materials to attain required compaction density.

When backfilling in freezing temperatures, cover pipe and tamp backfill around pipe using only loose, thawed material. When allowed to use subsoil fill, do not place frozen material in trench within 2 feet of top of pipe nor around manholes and other structures.

Remove surplus backfill materials from site. Leave fill material stockpile areas free of excess fill materials. Reshape and re-compact fills subjected to vehicular traffic.

D (Vacant)

E Payment

All backfilling to be included incidental to the sanitary sewer system, water distribution system, and other utility installations.

16. Disinfection of Water Distribution.

A Description

This special provision describes providing disinfection of potable water distribution system and testing and reporting results.

B Materials

B.1 References

B.1.1 American Water Works Association:

AWWA B300 - Hypochlorites.

AWWA B302 - Ammonium Sulfate.

AWWA B303 - Sodium Chlorite.

AWWA C600 - Installation of Ductile-Iron Water Mains and Their Appurtenances.

AWWA C651 - Disinfecting Water Mains.

B.1.2 Submittals

B.1.2.1 Product Data

Submit procedures, proposed chemicals, and treatment levels for review.

B.1.2.2 Test Reports

Indicate results comparative to specified requirements.

Perform Work according to AWWA C651.

Company specializing in testing and examining potable water systems, certified by the State of Wisconsin.

Submit bacteriologist's signature and authority associated with testing.

B.1.2.3 Disinfection Report

Type and form of disinfectant used.

Date and time of disinfectant injection start and time of completion.

Test locations.

Name of person collecting samples.

Initial and 24-hour disinfectant residuals in treated water in ppm for each outlet tested.

Date and time of flushing start and completion.

Disinfectant residual after flushing in ppm for each outlet tested.

B.1.2.4 Bacteriological Report

Date issued, project name, and testing laboratory name, address, and telephone number.

Time and date of water sample collection.

Name of person collecting samples.

Test locations.

Initial and 24-hour disinfectant residuals in ppm for each outlet tested.

Coliform bacteria test results for each outlet tested.

Certify water conforms, or fails to conform, to bacterial standards of the State of Wisconsin.

B.1.3 Products

B.1.3.1 Chemicals

AWWA B300, Hypochlorite.

C Construction

C.1 Examination

Verify piping system has been cleaned, inspected, and pressure tested.

Perform scheduling and disinfecting activity with start-up, water pressure testing, adjusting and balancing, demonstration procedures, including coordination with related systems.

C.2 Installation

Provide and attach required equipment to perform the Work of this section.

Perform disinfection of water distribution system and installation of system and pressure testing. Refer to the Water Main Section in these Special Provisions.

Inject treatment disinfectant into piping system.

Maintain disinfectant in system for 24 hours.

Flush, circulate, and clean until required cleanliness is achieved; use municipal domestic water.

Replace permanent system devices removed for disinfection.

C.3 Field Quality Control

C.3.1 Disinfection, Flushing, and Sampling

Disinfect pipeline installation according to AWWA C651. Use of liquid chlorine is not permitted.

Upon completion of retention period required for disinfection, flush pipeline until chlorine concentration in water leaving pipeline is no higher than that generally prevailing in existing system or is acceptable for domestic use.

Legally dispose of chlorinated water. When chlorinated discharge may cause damage to environment, apply neutralizing chemical to chlorinated water to neutralize chlorine residual remaining in water.

After final flushing and before pipeline is connected to existing system, or placed in service, employ an approved independent testing laboratory to sample, test and certify water quality suitable for human consumption and bacteriologically safe.

Testing shall be performed as follows:

- New or reconstructed well: a minimum of two bacteriological safe samples, taken at least 8 hours apart during the test pumping period, or on two separate days.
- Water storage facilities: two or more successive safe samples, taken at 24-hour intervals, shall be obtained which indicate bacteriologically safe water or one safe water sample shall be obtained only if a free chlorine residual of at least 0.1 mg/l is remaining when the results of the safe sample are reported.
- Distribution water mains: one bacteriologically safe sample shall be obtained per street and at a maximum interval of 1,200 feet of new water main installed. When new distribution systems or extension on a number of streets are installed, bacteriological samples shall be taken at representative locations (typically on each street) to establish that all of the improvement are free of contamination. If dead end mains are planned, a sample must be taken from the end of the dead end line.

D (Vacant)

E Payment

All disinfection and testing of the water distribution system to be included incidental to the water distribution system work of the project.

17. Removing Westby Locker and Meats Sign, Item 204.9060.S.001.

A Description

This special provision describes removing existing Westby Locker and Meats business sign conforming to standard spec 204.

B (Vacant)

C (Vacant)

D Measurement

The department will measure Removing Westby Locker and Meats Sign by each unit, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.001	Removing Westby Locker and Meats Sign	EACH
stp-204-025 (20230113)		

**18. Removing or Abandoning Conduit, Item 204.9090.S.001;
Removing Electrical Conductors from Existing Conduit, Item 204.9090.S.002.**

A Description

This special provision describes removing or abandoning conduit and removing electrical conductors from existing conduit conforming to standard spec 204.

B (Vacant)

C Construction

Conduit shall be removed as shown on the plans and as directed by the engineer. The engineer shall verify the extent of conduit removal prior to disconnecting luminaires. Any necessary stubs shall be capped and shall be incidental to this pay item. Removed conduit shall become property of the contractor and shall be disposed of off the project site.

Electrical conductors shall be removed from the existing underground conduits as shown on the plans and as directed by the engineer. The engineer shall verify the extent of the wiring removal prior to disconnecting luminaires. Any necessary splices or disconnections shall be done as part of this pay item. Removed wires shall become property of the contractor and shall be disposed of off the project site.

D Measurement

The department will measure Removing or Abandoning Conduit by linear feet, acceptably completed.

The department will measure Removing Electrical Conductors from Existing Conduit by linear feet of conduit from where wires shall be removed and disposed of, regardless of conductor quantity within conduit, acceptably completed. The vertical length and wire slack shall be incidental to this pay item.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9090.S.001	Removing or Abandoning Conduit	LF
204.9090.S.002	Removing Electrical Conductors from Existing Conduit	LF

stp-204-025 (20230113)

19. Base Aggregate Dense 3/4-Inch, Item 305.0110.

Add the following to standard spec 301.2.4.3:

Furnish only aggregate classified as crushed stone for Dense 3/4-Inch when used in the top 3 inches of the unpaved portion of the shoulder or for unpaved driveways and field entrances.

swr-305-001 (20170711)

20. Rout and Seal, Item 415.6000.S.

A Description

This special provision describes routing, cleaning, drying, and sealing the longitudinal edge of pavement joints in new asphaltic pavement shoulders immediately adjacent to the edge of the concrete mainline pavement.

B Materials

Furnish material that conforms to the requirements of the Specifications for Joint Sealants, Hot-Poured, for Concrete and Asphalt Pavements, ASTM Designation: D 6690, Type II, modified to require that the bond strength test be run at -20 degrees F. (The unmodified ASTM D 6690, Type II allows this test to be run at either 0 degrees F or -20 degrees F.)

Deliver each lot or batch of sealing compound to the jobsite in the manufacturer's original sealed container. Mark each container with the manufacturer's name, batch or lot number, and the safe heating temperature. Present the manufacturer's certification stating that the compound meets the requirements of this specification. Before applying the sealant, furnish to the engineer a certificate of compliance and a copy of the manufacturer's recommendations on heating and applying the sealant.

C Construction

C.1 Equipment

Heat the sealing compound to the pouring temperature recommended by the manufacturer in an approved kettle or tank, constructed as a double boiler, with the space between the inner and outer shells filled with oil or other satisfactory heat transfer medium. If, and when, using the heating kettle on concrete or asphaltic pavement, properly insulate the heating kettle to ensure heat is not radiated to the pavement surface.

Make rout cuts in a single pass. Two-pass cutting will not be allowed. Use a self-propelled mechanical router capable of routing the bituminous pavement to provide a 1.0:1.0 depth to width ratio of all routed cracks. The router blade or blades shall be of such size and configuration to cut the desired joint reservoir in one pass. No spacers between blades shall be allowed unless the contractor can demonstrate to the engineer that the desired reservoir and rout cut can be obtained with them. Either wet or dry routing will be permitted provided the above conditions are met. Use a pressure distributor for applying sealing material through a hand-operated wand or nozzle according to sealant manufacturer's instructions.

C.2 Methods

Conduct the operation so that the routing, cleaning, and sealing are continuous operations. Traffic shall not be allowed to knead together or damage the routed joints. Rerout, if necessary, routed joints not sealed before traffic is allowed on the pavement when routing and sealing operations resume. Do not perform rout cutting, cleaning, and sealing, within 48 hours of the placement of the shoulder's surface course.

Rout the longitudinal joint to a minimum width of 3/4 inches and a minimum depth of 3/4 inches. Use a power vacuum or equivalent to immediately remove any routing slurry, dirt, or deleterious matter adhering to the joint walls or remaining in the joint cavity, or both. Before sealing, dry the cleaned joints either by air-drying or by using a high capacity torch. Immediately before sealing, blow out the dried crack with a blast of compressed air, 80-psi minimum. Continue cleaning until the joint is dry, and until all dirt, dust, or deleterious matter is removed from the joint and adjacent pavement to the satisfaction of the engineer. If the air compressor produces dirt or other residue in the joint cavity, the contractor shall be required to clean the joint again.

If cleaning operations could cause damage to, or interfere with, traffic in adjacent lanes, or both, provide protective screening that is subject to the approval of the engineer to the cleaning operation.

Following cleaning, dry the routed joints and warm them with a hot air lance. Take care not to burn the pavement surface. Under no circumstances shall more than two minutes elapse between the time the hot air lance is used, and the sealant is placed.

Provide positive temperature control and mechanical agitation. Do not heat the sealant to more than 20 degrees F below the safe heating temperature. The safe heating temperature can be obtained from the manufacturer's shipping container. Provide a direct connecting pressure type extruding device with nozzles shaped for insertion into the joint. Immediately remove sealant spilled on the surface of the pavement.

Seal the joints when the sealant material is at the pouring temperature recommended by the manufacturer. Fill the joint such that after cooling, the sealant is flush with the adjacent pavement surface. Do not overfill the joint; the engineer may allow a very slight overband. Sand shall not be spread on the sealed joints to allow for opening to traffic. Before opening to traffic, the sealant shall be tack free.

D Measurement

The department will measure Rout and Seal in length by the linear foot, completed according to the contract and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
415.6000.S	Rout and Seal	LF

Payment is full compensation for rout cutting; cleaning the joint; sealing the joint; and cleanup.

stp-415-100 (20210113)

21. Concrete Steps.

Supplement standard spec 602.5.2 with the following:

Removal of existing steps, including any reinforcement and disposal of the materials, is considered incidental to the placement of Concrete Steps.

Railing, if required to be installed per the plan details including any reinforcement and connection materials, is considered incidental to the placement of Concrete Steps.

22. Cover Plates Temporary, Item 611.8120.S.

A Description

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

B Materials

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

C (Vacant)

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
611.8120.S	Cover Plates Temporary	EACH

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

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

stp-611-006 (20151210)

23. Fence Safety, Item 616.0700.S.

A Description

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

B Materials

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

Furnish fence fabric meeting the following requirements.

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

C Construction

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

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

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

D Measurement

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

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
616.0700.S	Fence Safety	LF

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

stp-616-030 (20160607)

24. Removing Signs Type II, Item 638.2602.

Replace standard spec 638.3.4(2) with the following:

- (2) Signs shall remain property of the department. Deliver signs to 3550 Mormon Coulee Road, La Crosse. Contact Eric Glindinning at (608) 792-7588 to coordinate the delivery. Separate the signs by plywood and aluminum and palletize them so they can be unloaded using a forklift. This work will be considered incidental to the bid item "Removing Signs Type II".

swr-638-001 (20141114)

25. Traffic Channelizing Curb System, Item 643.0650.S.

A Description

This special provision describes providing maintaining and removing temporary traffic channelizing curb system at locations the plans show or the engineer directs.

B Materials

Furnish items from the department's approved products list.

C Construction

Install the curb sections according to the manufacturer's recommendations. Install vertical panels or flexible tubular markers per manufacturer's recommendations.

Review and repair the channelizing system according to standard spec 643.3 or as the engineer directs.

Upon completion of the work, remove the channelizing system in a way that minimizes damage to the pavement. Repair damage done during removal as the engineer directs.

The temporary channelizing system shall remain the property of the contractor for systems used in temporary traffic control zones unless specified otherwise.

D Measurement

The department will measure Traffic Channelizing Curb System by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
643.0650.S	Traffic Channelizing Curb System	LF

Payment is full compensation for providing channelizing systems, and for maintaining, relocating, and removing the channelizing system.

stp-643-050 (20181119)

26. Crack and Damage Survey, Item 999.1501.S.

A Description

This special provision describes conducting a crack and damage survey of 101 South Bekkedal Avenue.

This Crack and Damage Survey shall consist of two parts. The first part, performed before construction activities, shall include a visual inspection, digital images, and a written report describing the existing defects in the building(s) being inspected. The second part, performed after the construction activities, shall also include a visual inspection, digital images, and written report describing any change in the building's condition.

B (Vacant)

C Construction

Before any construction activities, thoroughly inspect the building structures for existing defects, including interior and exterior walls. Electronically submit a written report with the inspector's name, date of inspection, descriptions and locations of defects, and digital images. The intent of the written report and digital images is to procure a record of the general physical condition of the building's interior and exterior walls and foundation.

Use a digital camera capable of producing sharp, grain free, high-contrast colored digital images with good shadow details. Label each digital image with the following information:

- ID: _____
- Building Location: _____
- View looking: _____
- Date: _____
- Photographer: _____

Before the start of any construction activities related to this survey, submit a copy of the written report and digital images to the engineer electronically.

After the construction activities are complete, conduct another survey in the same manner, take digital images, and submit another written report to the engineer electronically.

Instead of digital images, a digital video camera capable of producing sharp, high contrast, colored digital video with good shadow detail may be used to perform this work.

D Measurement

The department will measure Crack and Damage Survey as single unit for each location, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
999.1501.S	Crack and Damage Survey	EACH

Payment is full compensation for providing the before and after written reports, and for photographs or video.

stp-999-010 (20210708)

27. Adjusting Sanitary Manholes, Item SPV.0060.001.

A Description

This special provision describes rehabilitating existing sanitary sewer manhole chimney sections; adjusting existing sanitary sewer manhole castings; replacing manhole castings; and performing manhole adjusting method as per SPV-0060 Utility Adjustment Table, as shown on the plans, as directed by the engineer, and as hereinafter provided.

B Materials

B.1 Shop Drawings/Product Submittals

B.1.1 Shop Drawing

Submit manhole covers, component construction, features, configuration, and dimensions.

B.1.2 Manufacturer

Company specializing in manufacturing products specified in this section with minimum three years of documented experience.

B.1.3 Installer

Company specializing in performing work of this section with minimum one year of documented experience.

B.2 Product Materials

B.2.1 Frames and Covers

Frames and covers to be as per SPV-0060 Utility Adjustment Table of the Project Plans or pre-approved equal. Castings to conform to ASTM A48, Class 30B Cast iron construction. Lids shall be of uniform quality, free from blow holes, porosity, hard spots, shrinkage defects, cracks, or other serious defects. Lids shall also have machined flat bearing surface, sealed pick holes, self-sealing neoprene O-ring gasket, and be traffic rated (unless otherwise noted).

B.2.2 Adjustment Rings

Provide High Density Polyethylene (HDPE) adjusting rings by Ladtech, Inc. or pre-approved equal. HDPE to conform to ASTM D1248. Minimum thickness to be one 1/4-inch and maximum thickness to be 6 inches.

B.2.3 Joint Sealant

ASTM C990.

B.2.4 Bolts

Stainless steel ASTM F593; galvanized ASTM F1554.

B.2.5 Manhole Internal Seal for Adjusting Rings and Frame

Chimney Seal frame seals shall consist of a flexible internal rubber sleeve, interlocking extensions and stainless-steel expansion bands as manufactured by Cretex Specialty Products or a pre-approved equal conforming to the following requirements:

The seal shall remain flexible throughout a 25-year design life, allowing repeated vertical movement of the frame of not less than 2 inches and/or repeated horizontal movement of not less than 1/2 inch. The sleeve portion of the seal shall be either double or triple pleated with a minimum unexpanded vertical height of 0 inches to a maximum expanded vertical height of 24 inches. The sleeve and extension shall

have a minimum thickness of 3/16 inches and shall be made from a high-quality rubber compound conforming to the applicable requirements of ASTM C-923, with a minimum 1500 psi tensile strength, a maximum 18% compression set and a hardness (durometer) of 48+5. The area of the seal that compresses against the manhole frame/casting and the chimney/cone shall have a series of sealing fins to facilitate a watertight seal. These sealing fins shall have teardrop holes or air pockets to allow the sealing area to conform to minor irregularities that may be encountered.

The bands shall be integrally formed from 16-gauge stainless steel conforming to ASTM A-240, Type 304, with no welded attachments; shall have a minimum adjustment range of 2 diameter inches; and shall have a positive locking mechanism. Any screws, bolts or nuts used for this mechanism shall be stainless steel conforming to ASTM F-593 and 594, Type 304.

B.2.5 Manhole External Seal for Adjusting Rings and Frame

External joint seal shall meet or exceed the requirements of ASTM C-877, type II. External joint seals shall be Gator Wrap, or pre-approved equal conforming to the following requirements:

External joint seals shall consist of a collar 9 inch wide with an outer layer of polyethylene, with a minimum tensile strength of 4000 psi and a minimum tear resistance of 1500 psi.

B.3 Material Submittal

Provide a copy of all material submittals to the city for their review and approval.

C Construction

C.1 Preparation

Store products in areas protected from weather, moisture, or possible damage; do not store products directly on ground; handle products to prevent damage to interior or exterior surfaces.

Conduct operations not to interfere with, interrupt, damage, destroy, or endanger integrity of surface or subsurface structures or utilities, and landscape in immediate or adjacent areas.

Verify that field measurements and elevations are as indicated on the drawings.

Verify that excavation base is ready to receive work and that excavations, dimensions, and elevations are as indicated on drawings. Notify engineer of any discrepancies.

Identify required lines, levels, contours, and datum locations.

Locate, identify, and protect utilities to remain from damage.

Do not interrupt existing utilities without permission and without making arrangements to provide temporary utility services.

Survey the location of the manhole covers.

Remove designated manhole covers along with sufficient pavement to permit installation of temporary cover plate over the opening.

Fill the excavated area with asphaltic pavement mixture, which shall remain in place until contract milling and paving operations permit setting the manhole frames to grade.

Perform bedding, backfilling, and compaction according to the Backfill section in these Special Provisions.

C.2 Manhole Grade Adjustment

Locate manhole cover by using previously surveyed location to mark the center.

Remove asphaltic pavement mixture surrounding the manhole, the temporary cover plate, existing adjustment rings, and base down to the top of the structure.

Use flat or tapered HDPE manhole rings to achieve elevation indicated for frame and cover.

Seal joints between manhole top, HDPE rings, and frame with sealant.

Reinstall/replace manhole cover (as per SPV-0060 Utility Adjustment Table of the Project Plans) using HDPE adjustment rings to set the height and slope of the casting to the tolerances described on Project Plan Details.

Seal chimney area by installing an internal chimney seal utilizing a Cretex Internal Chimney Seal or by utilizing Gator Wrap to provide an external seal.

Perform bedding, backfilling, and compaction according to the Backfill section in these Special Provisions.

C.2 Manhole Grade Adjustment – Modifying Concrete Manhole Structure Height

Locate manhole cover by using previously surveyed location to mark the center.

Remove asphaltic pavement mixture surrounding the manhole, the temporary cover plate, existing adjustment rings, and base down to the top of the structure.

Saw cut and remove top of concrete structure as per SPV-0060 Utility Adjustment Table of the Project Plans.

Seal joints between manhole top, HDPE rings, and frame with sealant.

Reinstall/replace manhole cover (as per SPV-0060 Utility Adjustment Table of the Project Plans) using HDPE adjustment rings to set the height and slope of the casting to tolerances described on Project Plan Details.

Seal chimney area by installing an internal chimney seal utilizing a Cretex Internal Chimney Seal or by utilizing Gator Wrap to provide an external seal.

Perform bedding, backfilling, and compaction according to the Backfill section in these Special Provisions.

D Measurement

The department will measure Adjusting Sanitary Manholes by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.001	Adjusting Sanitary Manholes	EACH

Payment is full compensation for surveying; excavating; backfilling; compacting; removing existing casting, asphalt, concrete pavement, temporary cover plate, and existing adjustment rings; saw cutting concrete structure; supplying and installing casting, HDPE adjustment rings, sealant, internal chimney seal, and external adjustment ring and frame seal; and all materials, equipment, machinery, tools, labor, and construction means and methods necessary for Adjusting Sanitary Manholes.

28. Adjusting Sanitary Cleanout Frost Sleeve, Item SPV.0060.002.

A Description

This special provision describes adjusting existing sanitary cleanout frost sleeve as per SPV-0060 Utility Adjustment Table, as shown on the plans, as directed by the engineer, and as hereinafter provided.

B Materials

B.1 Product Submittals

B.1.1 Product Data

Submit product data to be used including frost sleeve.

B.1.2 Design Data

Submit manufacturer's latest published literature including illustrations, installation instructions, maintenance instructions and parts lists.

B.1.3 Manufacturer's Installation Instructions

Indicate special procedures required to install Products specified.

B.1.4 Manufacturer

Company specializing in manufacturing products specified in this Section with minimum three years of documented experience.

B.1.5 Installer

Company specializing in performing work of this section with minimum one year of documented experience.

B.1.6 Project Record Documents

Record actual locations of cleanouts and elevations.

Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

B.2 Product Materials

B.2.1 Frost Sleeve

Sioux Chief 850 Series adjustable access cover.

B.3 Material Submittal

Provide a copy of all material submittals to the city for their review and approval.

C Construction

C.1 Preparation

Store products in areas protected from weather, moisture, or possible damage; do not store products directly on ground; handle products to prevent damage to interior or exterior surfaces.

Conduct operations not to interfere with, interrupt, damage, destroy, or endanger integrity of surface or subsurface structures or utilities, and landscape in immediate or adjacent areas.

Verify that field measurements and elevations are as indicated on the drawings.

Verify that excavation base is ready to receive work and that excavations, dimensions, and elevations are as indicated on drawings. Notify engineer of any discrepancies.

Identify required lines, levels, contours, and datum locations.

Locate, identify, and protect utilities to remain from damage.

Do not interrupt existing utilities without permission and without making arrangements to provide temporary utility services.

Perform bedding, backfilling, and compaction according to the Backfill section in these Special Provisions.

Verify that items provided by other sections of Work are properly sized and located.

Survey the location of the cleanout.

C.2 Installation

Locate cleanout by using previously surveyed location to mark the center.

Remove asphaltic pavement, concrete pavement, or soil surrounding the cleanout.

Replace/adjust existing frost sleeve (as per SPV-0060 Utility Adjustment Table of the Project Plans) and set the height to the tolerances described on the Project Plan Details.

Protect cleanout and frost sleeve from damage or displacement until paving/landscaping operations are complete. Take care not to damage or displace installed cleanout and frost sleeve during construction. Repair or replace cleanout and frost sleeve that is damaged or displaced from construction operations.

Maintain existing sewer service.

All existing cleanouts and frost sleeves are to be adjusted to finished grade. If a cleanout or frost sleeve requires an extension to properly adjust to final grade of the asphalt surface/concrete surface/landscaping surface it will be supplied and installed by the contractor. If during the construction process the existing cleanouts or frost sleeves that are to remain are damaged, they must be replaced at no cost to the owner.

D Measurement

The department will measure Adjusting Sanitary Cleanout Frost Sleeve by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.002	Adjusting Sanitary Cleanout Frost Sleeve	EACH

Payment is full compensation for surveying; excavating; backfilling; compacting; removing existing broken cleanout or frost sleeve, asphalt, and concrete; furnishing and installing frost sleeve (if applicable) and extensions and adjusting cleanout and frost sleeve to finished grade; and for furnishing all tools, labor, materials, equipment, and incidentals necessary to complete Adjusting Sanitary Cleanout Frost Sleeve.

**29. Hydrant Removal, Item SPV.0060.003;
Valve Removal, Item SPV.0060.004.**

A Description

This special provision describes removing and disposing of existing hydrants and valves at locations as per SPV-0060 Utility Adjustment Table, as shown on the plans, as directed by the engineer, and as hereinafter provided.

B (Vacant)

C Construction

C.1 Removing Existing Hydrant

Existing fire hydrants removed to a minimum of 5 feet below finished grade or to the hydrant elbow, whichever is less. Cut off hydrant standpipe, seal pipe, and backfill and compact the resultant depression. Sealing the pipe is considered incidental to this item. Salvage the existing fire hydrant to the owner.

C.2 Removing Existing Valves

Existing valves to be removed are to be closed, the valve box removed, and the resulting depression backfilled and compacted.

D Measurement

The department will measure Hydrant Removal and Valve Removal by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.003	Hydrant Removal	EACH
SPV.0060.004	Valve Removal	EACH

Payment is full compensation for excavating; removing the existing fire hydrant and any necessary piping; temporary or permanent sealing the pipe; backfilling and compacting; salvaging to Owner; and for furnishing all tools, labor, materials, equipment, and incidentals necessary to complete the work.

Payment is full compensation for closing the valve or removing the valve as needed; excavating, removing the valve box; backfilling and compacting; and for furnishing all tools, labor, materials, equipment, and incidentals necessary to remove existing valve.

30. Water Main Gate Valve 6-Inch, Item SPV.0060.005.

A Description

This special provision describes furnishing and installing water main gate valves, providing permanent connections for the proposed water main to the existing water main, providing and installing main line water main and hydrant lead, and all associated fittings as per SPV-0060 Utility Adjustment Table, as shown on the plans, as further directed by the engineer in the field, and as hereinafter provided.

B Materials

B.1 References

B.1.1 ASTM International

ASTM A36/A36M - Standard Specification for Carbon Structural Steel.

ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.

ASTM A307 - Standard Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength.

ASTM D1784 - Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.

ASTM D2241 - Standard Specification for Poly (Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series).

ASTM D3139 - Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals.

ASTM F477 - Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe.

B.1.2 American Water Works Association

AWWA C104 - ANSI Standard for Cement Mortar Lining for Ductile-Iron Pipe and Fittings for Water.

AWWA C105 - ANSI Standard for Polyethylene Encasement for Ductile-Iron Pipe Systems.

AWWA C110 - ANSI Standard for Ductile-Iron and Gray-Iron Fittings, 3 In. Through 48 In. (76 mm Through 1,219 mm), for Water.

AWWA C111 - ANSI Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.

AWWA C115 - ANSI Standard for Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges.

AWWA C151 - ANSI Standard for Ductile-Iron Pipe, Centrifugally Cast, for Water or Other Liquids.

AWWA C153 - ANSI Standard for Ductile-Iron Compact Fittings for Water Service.

AWWA C500 - Gate Valves for Water and Sewage Systems.

AWWA C515 - Resilient-Seated Gate Valves for Water-Supply Service.

AWWA C550 - Protecting Epoxy Interior Coating for Valves and Hydrants.

AWWA C600 - Installation of Ductile-Iron Water Mains and Their Appurtenances.

AWWA C605 - Water Treatment - Underground Installation of Polyvinyl Chloride PVC Pressure Pipe and Fittings for Water.

AWWA C606 - Grooved and Shouldered Joints.

AWWA C900 - Polyvinyl Chloride (PVC) Pressure Pipe, and Fabricated Fittings, 4 In. through 12 In. (100 mm Through 300 mm), for Water Distribution.

AWWA C905 - Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 14 In. Through 36 In. (350 mm Through 1,200 mm), for Water Transmission and Distribution.

B.1.3 National Fire Protection Agency

NFPA 24 - Standard for the Installation of Private Fire Service Mains and Their Appurtenances.

B.1.4 National Sanitation Foundation

NSF 61 - Drinking Water System Components - Health Effects

B.2 Product Submittals

B.2.1 Product Data

Provide a copy of all material submittals to the city for their review and approval.

Submit product data to be used including valves, pipes, and accessories.

Submit data on pipe materials, pipe fittings, accessories, and other pertinent data indicating proposed materials, accessories, details, and construction information.

B.2.2 Design Data

Submit manufacturer's latest published literature including illustrations, installation instructions, maintenance instructions and parts lists.

B.2.3 Manufacturer's Installation Instructions

Indicate special procedures required to install Products specified.

B.2.4 Manufacturer's Certificates

Submit Statement of Compliance, supporting data, from material suppliers attesting that valves and accessories provided meet or exceed AWWA Standards and specification requirements.

Certify Products meet or exceed specified requirements.

B.2.5 Manufacturer

Company specializing in manufacturing products specified in this Section with minimum three years of documented experience.

B.2.6 Installer

Company specializing in performing work of this section with minimum one year of documented experience.

B.2.7 Project Record Documents

Record actual locations of water mains, fittings, connections, thrust blocks, joint restraints, valves, and elevations.

Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

Provide Operation and Maintenance Data for valves.

B.3 Product Materials

B.3.1 Resilient Wedge Gate Valves

B.3.1.1 Manufacturers

Mueller Company.

American Flow Control.

Substitutions: Pre-approved equal.

B.3.1.2 Components

AWWA C515; ductile iron.

Resilient seats.

B.3.1.2.1 Stem

Non-rising bronze stem.

B.3.1.2.2 Operating Nut

2-inch square; open counterclockwise unless otherwise indicated.

B.3.1.2.3 Ends

Mechanical joint connections.

B.3.1.2.4 Coating

AWWA C550; interior/exterior.

B.3.1.2.5 Sizes 12-inch diameter and smaller

Working pressure, 150 psig, tested to 300 psig.

B.3.2 Valve Boxes

Valve boxes to be Tyler/Union 6860 series, Bingham Taylor, or pre-approved equal.

Valve boxes to be domestic, made in U.S.A., cast iron, three-piece, screw type, with a round base.

Cast iron lid, marked "Water".

Provide Gate Valve Adaptor by Adaptor, Inc. or pre-approved equal.

B.3.3 Ductile Iron Pipe

AWWA C151.

B.3.3.1 Coating

Bituminous outside coating: AWWA C151.

B.3.3.2 Lining

Pipe Mortar Lining: AWWA C104, double thickness.

B.3.3.3 Class

Pipe Class: AWWA C151, for nominal thickness, rated water working pressure and maximum depth of cover. Class 52.

B.3.3.4 Length

Pipe Lengths: Minimum 16-foot long pipe sections.

B.3.3.5 Fittings

Ductile iron, made in U.S.A., Full Body fittings conforming to AWWA C110 or Compact fittings conforming to AWWA C153. 250 psig working pressure. Foundry must be NSF 61 Certified.

B.3.3.6.1 Coating and Lining

Bituminous Coating: AWWA C110.

Cement Mortar Lining: AWWA C104, standard thickness.

B.3.3.4.2 Joints

Mechanical and Push-On Joints (slip joint): AWWA C111.

ASTM D3139 PVC flexible elastomeric seals. Solvent-cement couplings are not permitted.

B.3.3.4.3 Joint Restraints

Joints connecting pipes to fittings, valves, and hydrants shall be restrained the required restrained length on each side of the fitting. One of the following shall be used.

- Joint restraint gasket on push-on joint pipe and fittings. U.S. Pipe/Field Lok Gasket, American Fast-Grip Gasket, or pre-approved equal.
- Use of wedge type restraining glands on mechanical joint pipe and fittings: Ebaa Iron/Megalug Series 1100, TUF Grip, or pre-approved equal.

Rubber Gaskets, Lubricants, Glands, Bolts and Nuts: AWWA C111.B.3.3

B.3.4 Nitrile or Fluoroelastomer Gaskets

B.3.4.1 Nitrile Gaskets

Synthetic rubber, NBR or Buna-N, to be a copolymer of butadiene and acrylonitrile. The nitrile gaskets shall provide acceptable resistance to refined petroleum products and be from American Cast Iron Pipe Company or approved equal. Use in pipe gaskets for water main pipe at locations as shown on the plans and/or as directed by the engineer. Install as per manufacturer's recommendations.

B.3.4.2 Fluoroelastomer Gaskets

Fluoroelastomer rubber to contain proportions of fluorine, ethylene, and propylene and to offer acceptable chemical resistance to industrial chemicals, including aromatics and chlorinated solvents, and refined petroleum products. The fluoroelastomer gaskets shall be used in severe operating conditions and be from American Cast Iron Pipe Company or approved equal. Use in pipe gaskets for water main pipe at locations as shown on the plans and/or as directed by the engineer. Install as per manufacturer's recommendations.

B.3.5 Polyethylene Encasement

Shall meet the requirements of ANSI/AWWA-C105/A21.5 Standard.

Shall be eight (8) mil thickness and be provided by CLOW or pre-approved equal.

The polyethylene flat tube width shall conform to the following for mechanical joint and push-on joint pipe: 20" for 6" dia. Pipe; 24" for 8" dia. Pipe; 27" for 10" dia. Pipe; and 30" for 12" dia. pipe.

Use on ductile iron pipe in corrosive soils at locations as shown on the plans and/or as directed by the engineer. Install as per manufacturer's recommendations.

B.3.6 Bedding and Cover Material

Bedding and Backfill Material as specified in the Backfill section in these Special Provisions.

B.3.7 Accessories

B.3.7.1 Concrete for Thrust Restraints

Conform to standard spec 501. Solid concrete blocks may be substituted with permission from engineer.

B.3.7.1.1 Concrete Blocks for Support

Solid concrete, 8"x16"x4" blocks.

B.3.7.2 Steel rods, bolt, lugs, and brackets

ASTM A36/A36M or ASTM A307 carbon steel.

B.3.7.3 Protective Coating

Bituminous coating.

B.3.7.4 Joint Restraining Glands

Ebaa Iron/Megalug Series 1100, TUF Grip, or pre-approved equal.

B.3.7.5 Polystyrene Insulation Board

Provide polystyrene insulation board that conforms to the requirements for Extruded Insulation Board, AASHTO Designation M230, except as hereinafter revised. Delete flammability requirement. Furnish and place polystyrene insulation board as shown on the plans.

B.3.7.6 Continuity Straps

Pipe shall be provided with copper conductive bonding straps to provide electrical continuity.

C. Construction

C.1 Preparation – Valve Installation

Prepare valves and accessories for shipment according to AWWA Standards and seal valve and ends to prevent entry of foreign matter into product body.

Deliver and store valves in shipping containers with labeling in place. Store products in areas protected from weather, moisture, or possible damage; do not store products directly on ground; handle products to prevent damage to interior or exterior surfaces.

Conduct operations not to interfere with, interrupt, damage, destroy, or endanger integrity of surface or subsurface structures or utilities, and landscape in immediate or adjacent areas.

Verify that field measurements and elevations are as indicated on the drawings.

Verify that excavation base is ready to receive work and that excavations, dimensions, and elevations are as indicated on drawings. Notify engineer of any discrepancies.

Identify required lines, levels, contours, and datum locations.

Locate, identify, and protect utilities to remain from damage.

Do not interrupt existing utilities without permission and without making arrangements to provide temporary utility services.

Perform trench excavation according to the Trenching Section in these Special Provisions.

Perform bedding, backfilling, and compaction according to the Backfill section in these Special Provisions.

C.2 Preparation – Connection to Existing Water Main

Excavate and locate the existing water main.

Verify existing utility water main sizes, locations, and elevations are as indicated on Drawings.

Cut pipe ends square, ream pipe and tube ends to full pipe diameter, remove burrs. Use only equipment specifically designed for pipe cutting. The use of chisels or hand saws will not be permitted. Grind edges smooth with beveled end for push-on connections.

Remove scale and dirt on inside and outside before assembly.

Prepare pipe connections to equipment with flanges or unions.

Prevent construction debris from entering water main pipes when making connection.

Maintain existing water service.

Abandon sanitary sewer pipes that become inactive due to the reconstruction project by capping or with a watertight neoprene gasket and seal and an approved non-shrink concrete grout.

Contractor is responsible for capping, draining, and abandoning the existing water mains that become inactive due to the reconstruction project by sealing or mechanically capping the ends.

C.3 Preparation – Water Main Piping and Hydrant Lead Piping

Block individual and stockpiled pipe lengths to prevent moving.

Do not place pipe or pipe materials on private property or in areas obstructing pedestrian or vehicle traffic. Do not place pipe flat on ground. Cradle to prevent point stress.

Store polyethylene materials out of direct sunlight.

Verify that field measurements and elevations are as indicated on the drawings.

Verify that excavation base is ready to receive work and that excavations, dimensions, and elevations are as indicated on drawings. Notify engineer of any discrepancies.

Cut pipe ends square, ream pipe and tube ends to full pipe diameter, remove burrs. Use only equipment specifically designed for pipe cutting. The use of chisels or hand saws will not be permitted. Grind edges smooth with beveled end for push-on connections.

Remove scale and dirt on inside and outside before assembly.

Prepare pipe connections to equipment with flanges or unions.

C.4 Installation – Valves

Install valves in conjunction with pipe laying according to the Water Main Section in these Special Provisions. Set valves plumb. Contractor to verify that valve will be operated with valve wrench.

Provide buried valves with valve boxes installed flush with finished grade.

Install Gate Valve Adaptors according to manufacturer's instructions.

Protect valve and valve box from damage or displacement until backfilling operation is complete. Take care not to damage or displace installed valves and valve boxes during construction of pipe supports, backfilling, testing, and other operations. Repair or replace valve or valve box that is damaged or displaced from construction operations.

Maintain existing water main service.

C.5 Installation – Pipe and Fittings

Excavate pipe trench according to the Trenching Section in these Special Provisions. Hand trim excavation for accurate placement of pipe to elevations indicated on Drawings.

Dewater excavations to maintain dry conditions and preserve final grades at bottom of excavation.

Provide sheeting and shoring according to the Trenching Section in these Special Provisions.

Correct over excavation with fine aggregate or washed stone in wet conditions.

Remove large stones or other hard matter capable of damaging pipe or impeding consistent backfilling or compaction.

Protect and support existing water lines, utilities, and appurtenances.

Maintain profiles of utilities. Coordinate with other utilities to eliminate interference. Notify engineer where crossing conflicts occur.

Place bedding material as per the Backfill Section in these Special Provisions.

Pipe shall be laid immediately following the preparation of the bedding material.

Install pipe according to AWWA C600 and AWWA C605.

Handle and assemble pipe according to manufacturer's instructions and as indicated on Drawings.

Maintain minimum 8-foot horizontal separation of water main from sewer piping according to NR 811.67.

Install pipe to indicated elevation to within tolerance of 1-inch.

Install ductile iron piping and fittings according to AWWA C600.

Route pipe in straight line. Relay pipe that is out of alignment or grade.

Install pipe with no high points. If unforeseen field conditions arise, which necessitate high points, install air release valves as directed by engineer.

Install pipe to have bearing along entire length of pipe. Excavate bell holes to permit proper joint installation. Do not lay pipe in wet or frozen trench.

Prevent foreign material from entering pipe during placement.

Install pipe to allow for expansion and contraction without stressing pipe or joints.

Close pipe openings with watertight plugs during work stoppages.

Install access fittings to permit disinfection of water system performed under the Disinfection of Water Distribution System Section in these Special Provisions.

Place backfill material around and above the pipe as per the Backfill Section in these Special Provisions.

Maintain optimum moisture content of bedding material to attain required compaction density.

Excavate and locate the existing water main.

Maintain existing water service.

Protect pipe and aggregate cover from damage or displacement until backfilling operation is complete. Take care not to damage or displace installed pipe and joints during construction of pipe supports, backfilling, testing, and other operations. Repair or replace pipe that is damaged or displaced from construction operations.

C.6 Installation – Thrust Restraints

Provide valves, tees, bends, caps, and plugs with concrete thrust blocks. Pour concrete thrust blocks against undisturbed earth. Locate thrust blocks at each elbow or change of pipe direction to resist resultant force and so pipe and fitting joints will be accessible for repair.

Install tie rods, clamps, set screw retainer glands, or restrained joints at all fittings, valves, and hydrants.

Install thrust blocks, tie rods, and joint restraint at dead ends of water main.

C.7 Field Quality Control

Perform pressure test on potable water distribution system according to AWWA C600.

Pressure test system to 150 psi. Repair leaks and re-test.

- After completion of pipeline installation, including backfill, but prior to final connection to existing system, conduct, in presence of engineer, concurrent hydrostatic pressure and leakage tests according to AWWA C600.
- Provide equipment required to perform leakage and hydrostatic pressure tests.
- Test Pressure: Not less than 150 psi or 50 psi in excess of maximum static pressure, whichever is greater.
- Conduct hydrostatic test for at least two-hour duration.
- No pipeline installation will be approved when pressure varies by more than 5 psi at completion of hydrostatic pressure test.
- Before applying test pressure, completely expel air from section of piping under test. Provide corporation cocks so air can be expelled as pipeline is filled with water. After air has been expelled, close corporation cocks and apply test pressure. At conclusion of tests, remove corporation cocks and plug resulting piping openings.
- Slowly bring piping to test pressure and allow system to stabilize prior to conducting leakage test. Do not open or close valves at differential pressures above rated pressure.

- Examine exposed piping, fittings, valves, hydrants, and joints carefully during hydrostatic pressure test. Repair or replace damage or defective pipe, fittings, valves, hydrants, or joints discovered, following pressure test.
- No pipeline installation will be approved when leakage is greater than that determined by the following formula:

$$L = \frac{SD\sqrt{P}}{148,000}$$

L = allowable, in gallons per hour

S = length of pipe tested, in inches

D = nominal diameter of pipe, in inches

p = average test pressure during leakage test, in pounds per square inch (gauge)

- When leakage exceeds specified acceptable rate, locate source and make repairs. Repeat test until specified leakage requirements are met.

D Measurement

The department will measure Water Main Gate Valve 6-Inch by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.005	Water Main Gate Valve 6-Inch	EACH

Payment is full compensation for excavating; trenching; bedding; backfilling; maintaining existing water system service; furnishing and installing the gate valve, valve box, gate valve adaptor, piping (main line water main and hydrant lead), temporary capping of hydrant lead, fittings, connections to existing distribution water main, concrete thrust blocks, joint restraints, accessories, and tests; and for furnishing all tools, labor, materials, equipment, and incidentals necessary to complete each 6-Inch Gate Valve.

31. Fire Hydrant 6-Inch, Item SPV.0060.006.

A Description

This special provision describes providing and installing 6-inch fire hydrants and all associated fittings as per SPV-0060 Utility Adjustment Table, as shown on the plans, as further directed by the engineer in the field, and as hereinafter provided.

B Materials

B.1 References

B.1.1 American Water Works Association

AWWA C502 - Dry-Barrel Fire Hydrants.

AWWA C550 - Protecting Epoxy Interior Coating for Valves and Hydrants.

AWWA C600 - Installation of Ductile-Iron Water Mains and Their Appurtenances.

B.1.2 National Sanitation Foundation

NSF 61 - Drinking Water System Components - Health Effects

B.1.3 National Fire Protection Agency

NFPA 281 - Recommended Practice for Fire Flow Testing and Marking of Hydrants

B.2 Product Submittals

B.2.1 Product Data

Submit product data to be used including hydrants, pipes, and accessories.

B.2.2 Design Data

Submit manufacturer's latest published literature including illustrations, installation instructions, maintenance instructions and parts lists.

B.2.3 Manufacturer's Installation Instructions

Indicate special procedures required to install Products specified.

B.2.4 Manufacturer's Certificates

Submit Statement of Compliance, supporting data, from material suppliers attesting that hydrants and accessories provided meet or exceed AWWA Standards and specification requirements.

B.2.5 Manufacturer

Company specializing in manufacturing products specified in this Section with minimum three years of documented experience.

B.2.6 Installer

Company specializing in performing work of this section with minimum one year of documented experience.

B.2.7 Project Record Documents

Record actual locations of hydrants, fittings, connections, thrust blocks, joint restraints, and elevations.

Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

Provide Operation and Maintenance Data for fire hydrants.

B.3 Product Materials

B.3.1 Fire Hydrants

B.3.1.1 Manufacturers

Waterous Pacer.

Substitutions: Not Permitted.

B.3.1.2 Components

B.3.1.2.1 Dry-barrel Break-away Type

AWWA C502; cast-iron body, compression type valve.

B.3.1.2.2 Bury Depth

As indicated in Hydrant Table included in the Project Plans and as per SPV-0060 Utility Adjustment Table of the Project Plans.

B.3.1.2.3 Inlet Connection

6-inches.

B.3.1.2.4 Valve Opening

5 ¼-inches diameter.

B.3.1.2.5 Ends

Mechanical Joint.

B.3.1.2.6 Bolts and Nuts

Corrosion resistant.

B.3.1.2.7 Coating

AWWA C550; interior.

B.3.1.2.8 Direction of Opening

Counterclockwise unless otherwise indicated.

B.3.1.2.9 Operating Nut

Pentagon shape, 1-inch on each side.

B.3.1.2.10 Traffic flange

No-flow separation.

B.3.1.2.11 Outlets

Pumper, one - 4 ½-inches; Hose Nozzles, two - 2 ½-inches.

Threads to be National Standard Threads.

Attach nozzle caps by heavy chains.

Centerline of pumper nozzle to traffic flange dimension = 26 inches.

B.3.1.2.12 Finish

Primer and two coats of enamel color according to fire department requirements.

B.3.2 Accessories

B.3.2.1 Concrete for Thrust Restraints

Conform to standard spec 501. Solid concrete blocks may be substituted with permission from engineer.

B.3.2.1.1 Concrete Blocks for Support

Solid concrete, 8"x16"x4" blocks.

B.3.2.2 Aggregate

Aggregate for hydrant drainage to be 1 ¼-inch washed stone wrapped in filter fabric.

B.3.2.3 Fittings

Ductile iron, Full Body fittings conforming to AWWA C110 or Compact fittings conforming to AWWA C153. 250 psig working pressure. Foundry must be NSF 61 Certified.

B.3.2.3.1 Coating and Lining

Bituminous Coating: AWWA C110.

Cement Mortar Lining: AWWA C104, standard thickness.

B.3.2.4 Joint Restraints

Joints connecting pipes to fittings, valves, and hydrants shall be restrained the required restrained length on each side of the fitting. One of the following shall be used.

- Joint restraint gasket on push-on joint pipe and fittings. U.S. Pipe/Field Lok Gasket, American Fast-Grip Gasket, or pre-approved equal.
- Use of wedge type restraining glands on mechanical joint pipe and fittings: Ebaa Iron/Megalug Series 1100, TUF Grip, or pre-approved equal.

B.4 Material Submittal

Provide a copy of all material submittals to the city for their review and approval.

C Construction

C.1 Preparation

Prepare hydrants and accessories for shipment according to AWWA Standards and seal hydrant and ends to prevent entry of foreign matter into product body.

Store products in areas protected from weather, moisture, or possible damage; do not store products directly on ground; handle products to prevent damage to interior or exterior surfaces.

Conduct operations not to interfere with, interrupt, damage, destroy, or endanger integrity of surface or subsurface structures or utilities, and landscape in immediate or adjacent areas.

Verify that field measurements and elevations are as indicated on the drawings.

Verify that excavation base is ready to receive work and that excavations, dimensions, and elevations are as indicated on drawings. Notify engineer of any discrepancies.

Identify required lines, levels, contours, and datum locations.

Locate, identify, and protect utilities to remain from damage.

Do not interrupt existing utilities without permission and without making arrangements to provide temporary utility services.

Perform trench excavation according to the Trenching Section in these Special Provisions.

Perform bedding, backfilling, and compaction according to the Backfill Section in these Special Provisions.

C.2 Installation

Install fire hydrants; provide support blocking and drainage gravel; do not block drain hole.

Set hydrants plumb with pumper nozzle facing roadway; set hydrants with centerline of pumper nozzle 26-inches above finished grade and safety flange not more than 6-inches nor less than 2-inches above grade.

Paint hydrants according to fire department requirements.

After hydrostatic testing, flush hydrants and check for proper drainage.

Install access fittings to permit flushing and disinfection of water system performed under the Disinfection of Water Distribution System Section in these Special Provisions.

Protect pipe and aggregate from damage or displacement until backfilling operation is complete. Take care not to damage or displace installed pipe and joints during construction of pipe supports, backfilling, testing, and other operations. Repair or replace pipe that is damaged or displaced from construction operations.

Maintain existing water main service.

C.3 Field Quality Control

Disinfection: Flush and disinfect potable water distribution system according to the Disinfection of Water Distribution System Section in these Special Provisions.

Pressure Test: Perform pressure test on fire hydrants according to AWWA C600 and the Water Main Section in these Special Provisions.

D Measurement

The department will measure Fire Hydrant 6-Inch by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.006	Fire Hydrant 6-Inch	EACH

Payment is full compensation for excavating; trenching; bedding; backfilling; maintaining existing water system service; furnishing and installing the fire hydrant, removing temporary cap, fittings, concrete thrust blocks, joint restraints, and accessories; testing; and for furnishing all tools, labor, materials, equipment, and incidentals necessary to complete each hydrant.

32. Adjusting Water Valves, Item SPV.0060.007.

A Description

This special provision describes adjusting existing water valve boxes and replacing water valve box top as per SPV-0060 Utility Adjustment Table, as shown on the plans, as directed by the engineer, and as hereinafter provided.

B Materials

B.1 Product Submittals

B.1.1 Product Data

Submit product data to be used including valve boxes.

B.1.2 Design Data

Submit manufacturer's latest published literature including illustrations, installation instructions, maintenance instructions and parts lists.

B.1.3 Manufacturer's Installation Instructions

Indicate special procedures required to install Products specified.

B.1.4 Manufacturer

Company specializing in manufacturing products specified in this Section with minimum three years of documented experience.

B.1.5 Installer

Company specializing in performing work of this section with minimum one year of documented experience.

B.1.6 Project Record Documents

Record actual locations of hydrants, valves, and elevations.

Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

B.2 Product Materials

B.2.1 Valve Boxes

Valve boxes to be Tyler/Union 6860 series, Bingham Taylor, or pre-approved equal.

Valve boxes to be domestic, made in U.S.A., cast iron, and screw type.

Cast iron lid, marked "Water".

B.3 Material Submittal

Provide a copy of all material submittals to the city for their review and approval.

C Construction

C.1 Preparation

Store products in areas protected from weather, moisture, or possible damage; do not store products directly on ground; handle products to prevent damage to interior or exterior surfaces.

Conduct operations not to interfere with, interrupt, damage, destroy, or endanger integrity of surface or subsurface structures or utilities, and landscape in immediate or adjacent areas.

Verify that field measurements and elevations are as indicated on the drawings.

Verify that excavation base is ready to receive work and that excavations, dimensions, and elevations are as indicated on drawings. Notify engineer of any discrepancies.

Identify required lines, levels, contours, and datum locations.

Locate, identify, and protect utilities to remain from damage.

Do not interrupt existing utilities without permission and without making arrangements to provide temporary utility services.

Perform bedding, backfilling, and compaction according to the Backfill Section in these Special Provisions.

Verify that items provided by other sections of Work are properly sized and located.

Survey the location of the water valve boxes.

Remove sufficient pavement to permit lowering of the existing water valve box.

Fill the excavated area with asphaltic pavement mixture, which shall remain in place until contract milling and paving operations permit setting the water valve box to grade.

C.2 Installation

Locate water valve box by using previously surveyed location to mark the center.

Remove asphaltic pavement mixture surrounding the water valve box.

Replace/adjust existing water valve box top (as per SPV-0060 Utility Adjustment Table of the Project Plans) and set the height to the tolerances described on the Project Plan Details.

Contractor to verify that valve will be operated with valve wrench.

Protect water valve box from damage or displacement until paving operation is complete. Take care not to damage or displace installed valve boxes during construction. Repair or replace valve box that is damaged or displaced from construction operations.

Maintain existing water main service.

All existing water valve boxes are to be adjusted to finished grade. If an existing or proposed water valve box requires a valve box extension or valve box riser to properly adjust to final grade of the asphalt surface it will be supplied and installed by the contractor. If during the construction process the existing water valves boxes that are to remain are damaged, they must be replaced at no cost to the Owner.

D Measurement

The department will measure Adjusting Water Valves by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.007	Adjusting Water Valves	EACH

Payment is full compensation for surveying; excavating; backfilling; compacting; removing existing broken valve box top, asphalt, and concrete; furnishing and installing water valve box top and extensions, adjusting water valve boxes to finished grade; and for furnishing all tools, labor, materials, equipment, and incidentals necessary to complete adjusting water valves.

33. Adjusting Water Service Curb Box, Item SPV.0060.008.

A Description

This special provision describes adjusting existing water service curb boxes as per SPV-0060 Utility Adjustment Table, as shown on the plans, as directed by the engineer, and as hereinafter provided.

B Materials

B.1 Product Submittals

B.1.1 Product Data

Submit product data to be used including water service curb boxes.

B.1.2 Design Data

Submit manufacturer's latest published literature including illustrations, installation instructions, maintenance instructions and parts lists.

B.1.3 Manufacturer's Installation Instructions

Indicate special procedures required to install Products specified.

B.1.4 Manufacturer

Company specializing in manufacturing products specified in this Section with minimum three years of documented experience.

B.1.5 Installer

Company specializing in performing work of this section with minimum one year of documented experience.

B.1.6 Project Record Documents

Record actual locations of curb boxes and elevations.

Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

B.2 Product Materials

B.2.1 Curb Boxes and Covers

Cast iron body, Extension Type, Mueller Company Model H-10385 for 1" curb stops.

Arch Pattern Base.

Mueller Company Model H-10300 Lid with inscription WATER, with Pentagon Plug.

Adjustable between 72" – 84".

B.2.1.1 Curb Box Extension

Cast iron body with threaded top and associated coupler with set screws.

B.3 Material Submittal

Provide a copy of all material submittals to the city for their review and approval.

C Construction

C.1 Preparation

Store products in areas protected from weather, moisture, or possible damage; do not store products directly on ground; handle products to prevent damage to interior or exterior surfaces.

Conduct operations not to interfere with, interrupt, damage, destroy, or endanger integrity of surface or subsurface structures or utilities, and landscape in immediate or adjacent areas.

Verify that field measurements and elevations are as indicated on the drawings.

Verify that excavation base is ready to receive work and that excavations, dimensions, and elevations are as indicated on drawings. Notify engineer of any discrepancies.

Identify required lines, levels, contours, and datum locations.

Locate, identify, and protect utilities to remain from damage.

Do not interrupt existing utilities without permission and without making arrangements to provide temporary utility services.

Perform bedding, backfilling, and compaction according to the Backfill Section in these Special Provisions.

Verify that items provided by other sections of Work are properly sized and located.

Survey the location of the water service curb box.

C.2 Installation

Locate water service curb box by using previously surveyed location to mark the center.

Remove asphaltic pavement, concrete pavement, or soil surrounding the water service curb box.

Replace/adjust existing water service curb box (as per SPV-0060 Utility Adjustment Table of the Project Plans) and set the height to the tolerances described on the Project Plan Details.

Contractor to verify that curb stop valve will be operated with curb stop valve wrench.

Protect water service curb box from damage or displacement until paving/landscaping operations are complete. Take care not to damage or displace installed water service curb boxes during construction. Repair or replace water service curb box that is damaged or displaced from construction operations.

Maintain existing water main service.

All existing water service curb boxes are to be adjusted to finished grade. If an existing water service curb box requires an extension to properly adjust to final grade of the asphalt surface/concrete surface/landscaping surface it will be supplied and installed by the contractor. If during the construction process the existing water service curb boxes that are to remain are damaged, they must be replaced at no cost to the Owner.

D Measurement

The department will measure Adjusting Water Service Curb Box by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.008	Adjusting Water Service Curb Box	EACH

Payment is full compensation for surveying; excavating; backfilling; compacting; removing existing broken water service curb box, asphalt, and concrete; furnishing and installing water service curb box (if applicable) and extensions, adjusting water service curb boxes to finished grade; and for furnishing all tools, labor, materials, equipment, and incidentals necessary to complete Adjusting Water Service Curb Box.

34. Install City Furnished Street Lighting Unit, Item SPV.0060.009.

A Description

This special provision describes installing city furnished street lighting units on a new concrete base. Furnishing and installing the concrete base shall be paid for separately.

B (Vacant)

C Construction

Install street lights according to the pertinent provisions of standard spec 657 and standard spec 659.

D Measurement

The department will measure Install City Furnished Street Lighting Unit by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.009	Install City Furnished Street Lighting Unit	EACH

Payment is full compensation for installing the lighting unit.

35. Remove and Replace Concrete Lattice Pavers, Item SPV.0060.010.

A Description

This special provision describes removing existing concrete lattice pavers, storing materials, and reinstalling at the locations shown in the plans, or as directed by the engineer.

B (Vacant)

C Construction

Construct final installation to replace existing pavers in kind at new grade.

D Measurement

The department will measure Remove and Replace Concrete Lattice Pavers by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.010	Remove and Replace Concrete Lattice Pavers	EACH

Payment is full compensation for removal, storage, and reinstallation of all materials.

36. Removing Electrified Sign, BlackJack Auto Sales, Item SPV.0060.011.

A Description

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

B (Vacant)

C Construction

Notify the property owner two weeks before the commercial sign is removed. Sign removal shall be reviewed and approved by the engineer before removal work begins. Coordinate with the property owner and electric utility to disconnect power to the commercial sign being removed. Remove the conduit from the existing sign to the easement line and place a temporary marker at the end of the remaining conduit. Remove the wire from the building to the removed sign. Sign poles, sign assemblies, and wiring shall become property of the contractor. Remove all removed items from the project site. The contractor is responsible for the legal hauling and disposal of the removed items.

D Measurement

The department will measure Removing Electrified Sign, BlackJack Auto Sales by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.011	Removing Electrified Sign, BlackJack Auto Sales	EACH

Payment is full compensation for disconnecting power, removing sign poles, sign assemblies, conduit, and wiring, hauling and disposal of items.

37. Electrical Service Meter Breaker Pedestal Special (CB400), Item SPV.0060.012.

A Description

Perform work according to the requirements of standard spec 656, the plans, standard detail drawings, and as hereinafter provided.

B Materials

According to the plans, standard spec 656.2 and as hereinafter provided:

Amend standard spec 656.2.3 Meter Breaker Pedestal Service, by adding the following paragraphs:

- (2) Furnish a 2-pole 100amp 120/240 Volt main breaker with 22,000 AIC rating or per utility requirements to be installed inside the meter breaker pedestal.
- (3) Furnish photocell and lighting contactors capable of operating the designed lighting system as shown on the plans and construction details. Install the controls inside a 12" x 16" x 6" minimum, NEMA 3R rated outdoor enclosure with interior back plate. The enclosure shall be mounted to the 2"x 2" stainless steel square tubing supports. Photocell to be mounted on the outside of the enclosure.
- (4) Furnish 2" x 2" stainless steel square tubing, concrete masonry and steel reinforcement as the plans show for rigidly mounting the meter pedestal.
- (5) Furnish a 100amp 120/240 volt single phase 12 space 12 circuit breaker panel with a 100 amp main breaker, installed inside a NEMA 3R outdoor rated enclosure to be attached to the 2" x 2" stainless steel tubing supports. The main breaker is not allowed to occupy two of the twelve spaces required in the breaker panel.
- (6) Furnish 2-pole and single pole 20amp circuit breakers in the electrical panel as required for the amount of circuits shown on the plans including one separate circuit for the lighting controls.
- (7) Furnish all conduit, fittings, hardware, fasteners, terminals, breakers, wiring and any additional items necessary to complete the meter breaker pedestal, electrical panel and lighting control installation per the NEC, local and State codes, as shown on the plans, the construction details and described in this special provision.

C Construction

According to the plans and standard spec 656.3 and as hereinafter provided:

Ensure that electrical service is installed and energized a minimum of one week prior to the roundabout opening to traffic.

D Measurement

The department will measure Electrical Service Meter Breaker Pedestal Special by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.012	Electrical Service Meter Breaker Pedestal Special (CB400)	EACH

Payment is full compensation for furnishing and installing all materials; for excavation, backfill, disposal of surplus materials and permit fees.

38. Temporary Wood Poles for Lighting, Item SPV.0060.013.

A Description

This special provision describes furnishing and installing temporary wood poles for lighting during the winter shut-down at the STH 27 roundabout.

B Materials

Furnish wood poles as needed to provide temporary supports for luminaires and overhead wiring. Furnish poles conforming to the requirements in standard spec 661.2.1.1. All poles shall be a minimum of 40-feet in length.

C Construction

Install poles conforming to the requirements in standard spec 661.3. The engineer will determine final pole positions after marking the utilities in the field.

D Measurement

The department will measure the Temporary Wood Poles for Lighting bid item by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.013	Temporary Wood Poles for Lighting	EACH

Payment is full compensation for furnishing and installing all materials; for excavation, backfill, disposal of surplus materials, and maintaining the system over the winter shutdown.

39. Temporary Luminaires and Arms, Item SPV.0060.014.

A Description

This special provision describes furnishing and installing temporary luminaires and arms for lighting during the winter shut-down at the STH 27 roundabout.

B Materials

Furnish 6-foot luminaire arms as needed to provide temporary supports for luminaires. Furnish arms conforming to the requirements in standard spec 657.2.4.

Furnish luminaires conforming to the requirements under standard spec 659.2. All luminaires shall be equivalent to a WisDOT LED B.

C Construction

Install arms conforming to all requirements under standard spec 657.3. Orient arms to be 90 degrees to the adjacent roadway unless shown otherwise on the plan.

Install luminaires conforming to all requirements under standard spec 659.3.

D Measurement

The department will measure the Temporary Luminaires and Arms bid item by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.014	Temporary Luminaires and Arms	EACH

Payment is full compensation for furnishing and installing all materials; and maintaining the system over the winter shutdown.

**40. Inlet 5-FT Diameter, Item SPV.0060.100;
Inlet 6-FT Diameter, Item SPV.0060.101;
Inlet 8-FT Diameter, Item SPV.0060.102.**

A Description

This special provision describes furnishing and installing inlets according to the pertinent provisions of standard spec 611 and as hereinafter provided.

B Materials

Furnish materials that conform to the requirements of the standard spec 611.2 and the following requirements.

Inlet diameter shall be 5 feet, 6 feet or 8 feet respectively.

Minimum wall thickness shall be 6 inches for precast inlets.

Precast flat slab tops and bases shall have a minimum thickness of 8 inches.

Inlet cover opening shall be 2-feet x 3-feet or as required by the size of the inlet cover.

C Construction

C.1 General

Construct the inlet according to standard spec 611.3.

D Measurement

The department will measure Inlet (Size) as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.100	Inlet 5-FT Diameter	EACH
SPV.0060.101	Inlet 6-FT Diameter	EACH
SPV.0060.102	Inlet 8-FT Diameter	EACH

Payment is full compensation for providing all materials, including all masonry, conduit and sewer connections, steps, and other fittings; for all excavating, backfilling, disposing of surplus material, and for cleaning out and restoring the work site; except that the department will pay for covers, including frames, grates, and lids separately.

41. Inlet Covers Type S Special, Item SPV.0060.103.

A Description

This special provision describes furnishing and installing Inlet Covers Type S-Special according to the pertinent provisions of standard spec 611 and as hereinafter provided.

B Materials

Furnish inlet cover conforming to standard spec 611 and shall be Neenah R-3210-Q, East Jordan Iron Works V5622-80, or approved equal.

C Construction

C.1 General

Construct the inlet according to standard spec 611.3.

D Measurement

The department will measure Inlet Covers Type S Special as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.103	Inlet Covers Type S Special	EACH

Payment is full compensation according to standard spec 611.5.

42. Inlet Covers Flat Temporary, Item SPV.0060.104.

A Description

This special provision describes furnishing, installing, adjusting, and removing temporary inlet covers on existing storm sewer structures at locations shown in the plans.

B Materials

Furnish inlet covers per the pertinent requirements of standard spec 611. Provide open grates for drainage, traversable by vehicle and bicycle traffic, and rated for traffic loading.

C Construction

Remove the existing inlet or manhole cover and place the temporary inlet cover on the existing structure with the necessary adjustments per standard spec 611. Adjust and set the grade of the inlet cover to meet the final surface of the temporary pavement for traffic lanes. Bolt inlet covers placed within lanes open to traffic to the inlet or inlet frame.

Remove the temporary inlet cover once no longer needed in the temporary traffic lanes.

D Measurement

The department will measure Inlet Covers Flat Temporary as each individual temporary flat inlet cover, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.104	Inlet Covers Flat Temporary	EACH

Payment is full compensation for furnishing temporary inlet covers, including frames, grates, or lids; for furnishing all necessary bolting; and for furnishing all other required materials and for installing, adjusting, and removing each cover. Upon removal, the temporary inlet cover becomes the property of the contractor.

swr-611-002 (20171031)

43. Temporary Inlet, Item SPV.0060.105.

A Description

This special provision describes the provision, installation, and removal of a temporary inlet.

B Materials

Furnish either a new or salvaged inlet and casting in a condition suitable for the purpose intended. Conform to the pertinent requirements of standard spec 611.

C Construction

Conform to the pertinent requirements of standard spec 611.

Where a temporary pipe is connected then removed from a permanent inlet or manhole, patch the opening in the permanent structure to create a watertight seal.

D Measurement

The department will measure Temporary Inlet as each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.105	Temporary Inlet	EACH

Payment is full compensation for providing all materials, including all masonry, fittings, and castings; for furnishing all excavating, backfilling, disposing of surplus material; for connecting sewer, for cutting and removal of existing sewer pipe, for removal and disposal of the inlet and casting, patching permanent structure that temporary pipe is connected to, and for restoring the work site.

The department will pay for concrete collars separately.

44. Reveal Curb, Item SPV.0090.001.

A Description

This special provision describes constructing curb and gutter at the locations shown in the plans, or as directed by the engineer.

B Materials

Furnish concrete curb that is according to the pertinent requirements of standard spec 601.

C Construction

Place curb in locations to cover the building face to the existing reveal line of the building foundation. Curb is to be installed in cases where the building foundation will remain exposed upon completion of the sidewalk installation.

D Measurement

The department will measure Reveal Curb by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.001	Reveal Curb	LF

Payment is full compensation for furnishing all foundation excavation and preparation; for providing all materials, including concrete, expansion joints; for placing, finishing, protecting, and curing; for sawing joints; and for disposing of surplus excavation material, and restoring the work site.

45. Concrete Curb & Gutter 3-Inch Sloped 36-Inch Type R, Item SPV.0090.002.

A Description

This special provision describes constructing curb and gutter at the locations shown in the plans, or as directed by the engineer.

B Materials

Furnish concrete that conforms to the requirements for concrete curb and gutter according to standard spec 601. Provide QMP for class II ancillary concrete as specified in standard spec 716.

C Construction

Construct according to the requirements of standard spec 601.

D Measurement

The department will measure Concrete Curb & Gutter 3-Inch Sloped 36-Inch Type R by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.002	Concrete Curb & Gutter 3-Inch Sloped 36-Inch Type R	LF

Payment is full compensation according to standard spec 601.

46. Remove and Replace Vinyl Fencing, Item SPV.0090.003.

A Description

This special provision describes removing existing vinyl fencing, storing materials, and reinstalling at the locations shown in the plans, or as directed by the engineer.

B Materials

Furnish any necessary hardware required for reinstallation. Replace post bedding material in kind with what the existing material consists of.

C Construction

Construct final installation to replace existing fence in kind.

D Measurement

The department will measure Remove and Replace Vinyl Fencing by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.003	Remove and Replace Vinyl Fencing	LF

Payment is full compensation for removal, storage, and reinstallation of all materials and providing any necessary hardware.

47. Temporary Aerial Cable, Item SPV.0090.004.

A Description

This special provision describes furnishing and installing temporary aerial cable for lighting during the winter shut-down at the STH 27 roundabout.

B Materials

Furnish aerial cable consisting of an assembly of triplex cable with #1 aluminum conductors with an ACSR messenger (grounding) wire. Furnish a quantity of parallel cable assemblies as needed to maintain lighting circuits as shown on the plans. Furnish guy, span and messenger wire conforming to the requirements in standard spec 661.2.1.3. Furnish aerial cable mounting hardware conforming to the requirements in standard spec 661.2.1.4.

C Construction

Install aerial cable and mounting hardware conforming to all requirements under standard spec 661.3.

D Measurement

The department will measure the Temporary Aerial Cable bid item by the linear foot of cable, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.004	Temporary Aerial Cable	LF

Payment is full compensation for furnishing and installing all materials; and maintaining the system over the winter shutdown.

48. Pipe Underdrain (6-Inch) with Geotextile Fabric and Aggregate, Item SPV.0090.100.

A Description

This special provision describes providing and placing pipe underdrain, geotextile fabric, and aggregate as shown on the plans and hereinafter provided. The work under this item shall be according to the standard specifications for each component.

B Materials

B.1 Pipe

Provide Pipe Underdrain 6-Inch conforming to the pertinent requirements of standard spec 612.2.

B.2 Geotextile Fabric

Provide Geotextile Fabric Type DF Schedule B conforming to the pertinent requirements of standard spec 645.2.1 and 645.2.4.

B.3 Aggregate

Provide coarse aggregate size No. 1 conforming to the pertinent requirements of standard spec 501.2.5.4.

C Construction

Construct the Pipe Underdrain (6-Inch) with Geotextile Fabric and Aggregate as the plans show and conforming to standard spec 612.3.1, 612.3.3, 612.3.5, and 645.3.4.

D Measurement

The department will measure Pipe Underdrain (6-Inch) with Geotextile Fabric and Aggregate by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.100	Pipe Underdrain (6-Inch) with Geotextile Fabric and Aggregate	LF

Payment is full compensation for providing and placing all materials, including pipe underdrain, geotextile fabric, aggregate, backfill, connections, fittings, and caps or plugs; and for all excavating, recompacting, disposing of surplus material, and restoring the work site.

swr-612-001 (20160205)

**49. Wall Modular Block Mechanically Stabilized Earth R-62-25, Item SPV.0165.001;
Wall Modular Block Mechanically Stabilized Earth R-62-26, Item SPV.0165.002.**

A Description

This special provision describes designing, furnishing materials, and erecting a permanent earth retention system according to the lines, dimension, elevations, and details as shown on the plans and provided in the contract. The design life of the wall and all wall components shall be 75 years minimum.

This special provision describes the quality management program (QMP) for Mechanically Stabilized Earth (MSE) walls. A quality management program is defined as all activities, including process control, inspection, sampling and testing, and necessary adjustments in the process that are related to the construction of the MSE wall, which meets all the requirements of this provision.

This special provision describes contractor quality control (QC) sampling and testing for backfill density testing, documenting those results, and documenting related production and placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.

Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes sampling and testing procedures.

B Materials

B.1 Proprietary Wall Systems

The supplied wall system must be from the department's approved list of Modular Block Mechanically Stabilized Earth Wall systems. Proprietary wall systems must conform to the requirements of this specification and be pre-approved for use by the department's Bureau of Structures. The department maintains a list of pre-approved proprietary wall systems. See the approved products list titled "Proprietary Retaining Wall System Vendors." The name of the pre-approved proprietary wall system selected shall be furnished to the engineer within 25 days after the award of contract. The department also maintains a separate list of plants pre-approved by the department to provide wall facing units. See the approved products list titled "Precast Concrete and Block Fabricators." The identity of the plant manufacturing the facing units shall be furnished to the engineer at least 14 days prior to the project delivery.

To be eligible for use on this project, a system must have been pre-approved by the Bureau of Structures and added to that list prior to the bid closing date. To receive pre-approval, the retaining wall system must comply with all pertinent requirements of this provision and be prepared according to the requirements of Chapter 14 of the department's LRFD Bridge Manual. Information and assistance with the pre-approval process can be obtained by contacting the Bureau of Structures, Structures Maintenance Section at the following email address: DOTDLStructuresFabrication@dot.wi.gov.

To be eligible to provide wall facing units for this project, a block manufacturing plant must be pre-approved by the Bureau of Technical Services and added to that list prior to the bid closing date. Information and assistance with the pre-approval process can be obtained by contacting the Bureau of Technical Services at the following email address: DOTProductSubmittal@wisconsin.gov.

B.2 Design Requirements

It is the responsibility of the contractor to submit a design and supporting documentation as required by this special provision, for review and acceptance by the department, to show the proposed wall design conforms to the design specifications. The submittal shall include the following items for review: detailed plans and shop drawings, complete design calculations, explanatory notes, supporting materials, and specifications. The detailed plans and shop drawings shall include all details, dimensions, quantities, and cross-sections necessary to construct the walls. Submit shop drawings to the engineer conforming to 105.2 with electronic submittal to the fabrication library under standard spec 105.2.2. Certify that shop drawings conform to quality control standards by submitting department form [DT2329](#) with each set of shop drawings. Department review does not relieve the contractor from responsibility for errors or omissions on shop drawings. Submit no later than 60 days from the date of notification to proceed with the project and a minimum of 30 days prior to the date proposed to begin wall construction.

The plans and shop drawings shall be prepared on reproducible sheets 11 inch x 17 inch, including borders. Each sheet shall have a title block in the lower right corner. The title block shall include the WisDOT project identification number and structure number. Design calculations and notes shall be on 8 ½ inch x 11 inch sheets, and shall contain the project identification number, name or designation of the wall, date of preparation, initials of designer and checker, and page number at the top of the page. All

plans, shop drawings, and calculations shall be signed, sealed, and dated by a professional engineer licensed in the State of Wisconsin.

The design of the wall shall be in compliance with the current American Association of State Highway and Transportation Officials LRFD (AASHTO LRFD) Bridge Design Specifications with latest interim specifications for Mechanically Stabilized Earth Walls, WisDOT's current Standard Specifications for Highway and Structure Construction (standard spec), Chapter 14 of the WisDOT LRFD Bridge Manual and standard engineering design procedures as determined by the department. Loads, load combinations, load and resistance factors shall be as specified in AASHTO LRFD Section 11. The associated resistance factors shall be defined according to Table 11.5.7-1 in AASHTO LRFD.

Design and construct the walls according to the lines, grades, heights, and dimensions shown on the plans, as herein specified, and as directed by the engineer.

Walls parallel to supporting highway traffic shall be designed for the effects of highway surcharge loading equivalent of 2 feet soil surcharge weight or 240 psf. The design shall also consider the traffic barrier impact where applicable. Walls that do not carry highway traffic shall be designed for a live load surcharge of 100 psf according to Chapter 14 of the WisDOT LRFD Bridge Manual or as stated on the plans.

A maximum value of the angle of internal friction of the wall backfill material used for design shall be assumed to be 30 degrees without a certified report of tests. If a certified report of tests yields an angle of internal friction greater than 30 degrees, the larger test value may be used for design, up to a maximum value of 36 degrees.

An external stability check at critical wall stations showing Capacity Demand Ratio (CDR) for sliding, eccentricity, and bearing checks is provided by the department and are provided on the wall plans.

The design of the wall by the contractor shall consider the internal and compound stability of the wall mass according to AASHTO LRFD 11.10.6. The internal stability shall include soil reinforcement pullout, soil reinforcement rupture, and wall facing-reinforcement connection failure at each soil reinforcement level. The design shall be performed using the Simplified Method or Coherent Gravity Method. Calculations for factored stresses and resistances shall be based upon assumed conditions at the end of the design life. Compound stability shall be computed for the applicable strength limits. Sample analyses and hand calculations shall be submitted to verify the output of any software used. The design calculations and notes shall clearly indicate the Capacity to Demand Ratios (CDR) for all internal and external stabilities as defined in AASHTO LRFD.

Wall facing units shall be designed according to AASHTO LRFD 11.10.2.3.

The minimum length of soil reinforcement measured from the back face of the wall shall be equal to 0.7 of the wall height, or as shown on the plan. In no case shall this length be less than 6.0 feet. The soil reinforcement length shall be the same from the bottom to the top of the wall. All soil reinforcement layers shall be connected to facings. The soil reinforcement shall extend a minimum of 3.0 feet beyond the theoretical failure plane in all cases. The maximum vertical spacing of soil reinforcement layers shall be two times the block width (front face to back face) or 32 inches, whichever is less. The first (bottom) layer of reinforcement shall be placed no further than 12 inches above the top of the leveling pad or the height of the block, but at least one block height above the leveling pad. The last (top) layer of soil reinforcement shall be no further than 21 inches below the top of the uppermost block.

All soil reinforcement required for the reinforced soil zone shall be connected to the wall facing.

Soil reinforcement shall be fabricated or designed to avoid piling, drainage structures or other obstacles in the fill without field modifications. Unless approved by the Bureau of Structures cutting or altering of the basic structural section of either the strip or grid at the site is prohibited, a minimum clearance of 3" shall be maintained between any obstruction and reinforcement, and splicing reinforcement is not allowed.

The minimum embedment of the wall shall be 1 foot 6 inches below finished grade, or as given on the plans. All walls shall be provided with a concrete leveling pad. Minimum wall embedment does not include the leveling pad depth. Step the leveling pad to follow the general slope of the ground line. Frost depth shall not be considered in designing the wall for depth of leveling pad.

Wall facing units shall be installed on a leveling pad.

B.3 Wall System Components

Materials furnished for wall system components under this contract shall conform to the requirements of this specification. All documentation related to material and components of the wall systems specified in this subsection shall be submitted to the engineer.

B.3.1 Wall Facing

Wall facing units shall consist of precast modular concrete blocks. Furnish concrete produced by a dry-cast or wet-cast process. Concrete for all blocks shall not contain less than 565 pounds of cementitious materials per cubic yard. The contractor may use cement conforming to standard spec. 501.2.1 or may substitute for Portland cement at the time of batching conforming to standard spec 501.2.6 for fly, 501.2.7 for slag, or 501.2.8 for other pozzolans. In either case the maximum total supplementary cementitious content is limited to 30% of the total cementitious content by weight.

Dry-cast concrete blocks shall be manufactured according to ASTM C1372 and this specification.

All units shall incorporate a mechanism or devices that develop a mechanical connection between vertical block layers. Units that are broken, have cracks wider than 0.02" and longer than 25% of the nominal height of the unit, chips larger than 1", have excessive efflorescence, or are otherwise deemed unacceptable by the engineer, shall not be used within the wall. A single block front face style shall be used throughout each wall. The color and surface texture of the block shall be as given on the plan.

The top course of facing units shall be as noted on the plans, either;

- Solid precast concrete unit designed to be compatible with the remainder of the wall. The finishing course shall be bonded to the underlying facing units with a durable, high strength, flexible adhesive compound compatible with the block material.
- A formed cast-in-place concrete cap. A cap of this type shall have texture, color, and appearance, as noted on the plans. The vertical dimension of the cap shall not be less than 3 1/2 inches. Expansion joints shall be placed in the cap at a maximum spacing of 20 feet unless noted otherwise on the plan. Use Grade A concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for cast in place cap and coping concrete as specified in standard spec 716, Class II Concrete.

Block dimensions may vary no more than $\pm 1/8$ inch from the standard values published by the manufacturer. Blocks must have a minimum width (front face to back face) of 8 inches. The minimum front face thickness of blocks shall be 4 inches measured perpendicular from the front face to inside voids greater than 4 square inches. The minimum allowed thickness of any other portions of the block is $1\frac{3}{4}$ inches. The front face of the blocks shall conform to plan requirements for color, texture, or patterns.

If pins are used to align modular block facing units, they shall consist of a non-degrading polymer, or hot dipping galvanized steel and be made for the express use with the modular block units supplied, to develop mechanical interlock between facing unit block layers. Connecting pins shall be capable of holding the wall in the proper position during backfilling. Furnish documentation that establishes and substantiates the design life of such devices.

All block materials shall be furnished palletted and banded, with every pallet marked for quantity, lot number, lot size, manufacturing plant, and manufacturing date(s). Materials furnished loose or unmarked will be rejected. Rejected materials shall be removed from the project at no cost to the department.

B.3.1.1 Material Testing

Perform or procure quality control testing of project materials according to the following requirements:

Test	Method	Requirement	
		Dry-cast	Wet-cast
Compressive Strength (psi)	ASTM C140 or ASTM C39 ^[4]	5000 min.	4000 min.
Air Content (%)	AASHTO T152 ^[4]	N/A	6.0 +/-1.5
Water Absorption (%)	ASTM C140 ^[3]	6 max.	N/A
Freeze-Thaw Loss (%) 40 cycles, 5 of 5 samples 50 cycles, 4 of 5 samples	ASTM C1262 ^{[1][2][3]}	1.0 max. 1.5 max.	N/A

- [1] Test shall be run using a 3% saline solution and blocks greater than 45 days old.
- [2] Test results that meet either of the listed requirements for Freeze-Thaw Loss are acceptable.
- [3] An independent testing laboratory shall control and conduct all sampling and testing under ASTM C140/Water Absorption and ASTM C1262. Prior to sampling, the manufacturer shall identify materials by lot. Five blocks per lot shall be randomly selected for testing. Solid blocks used as a finishing or top course shall not be selected. The selected blocks shall remain under the control of the person who conducted the sampling until shipped or delivered to the testing laboratory.
- [4] The manufacturer may perform their own quality control testing under ASTM C140/Compressive Strength, ASTM C39, and AASHTO T152, if qualified for this work under the requirements for plant certification.

The contractor and fabricator shall coordinate with the independent testing agent (if used) to ensure that strength and air content samples can be taken appropriately during manufacturing. At the time of delivery of materials, furnish the engineer a certified report of test from an AASHTO-registered or ASTM-accredited independent testing laboratory for each lot furnished.

The certified test report shall include the following:

- Project ID
- Production process used (dry-cast or wet-cast)
- Name and location of testing facility
- Name of sampling technician
- Lot number, lot size, and date(s) of fabrication.

Quality control testing of project materials shall be completed not more than 18 months prior to delivery. Lot size shall not exceed the maximum testing frequencies, which shall not exceed 5000 blocks for dry-cast blocks and the lesser of 150 CY or 1 day's production for wet-cast blocks. Test results will represent all blocks within the lot. Each pallet of blocks delivered shall bear lot identification information. Block lots that do not meet the requirements of this specification or blocks without supporting reports will be rejected and shall be removed from the project at no expense to the department.

Nonconforming materials will be subject to evaluation according to standard spec 106.5.

B.3.2 Leveling Pad

Provide an unreinforced cast-in-place concrete leveling pad. Use Grade A concrete conforming to standard spec 501 as modified in standard spec 716. Provide QMP for leveling pad concrete as specified in standard spec 716, Class III Concrete.

The minimum width of the concrete leveling pad shall be as wide as the proposed blocks plus 6-inches, with 6-inches of the leveling pad extending beyond the front face of the blocks. The minimum thickness of the leveling pad shall be 6-inches.

B.3.3 Backfill

Furnish and place backfill for the wall as shown on the plans and as hereinafter provided.

Wall Backfill, Type A, shall comply with the requirements for Coarse Aggregate No. 1 as given in standard spec 501.2.7.4.2. All backfill placed within a zone from the top of the leveling pad to the top of the final layer of wall facing units and within 1 foot behind the back face of the wall shall be Wall Backfill, Type A. This includes all material used to fill openings in the wall facing units.

Wall Backfill, Type B, shall be placed in a zone extending horizontally from 1 foot behind the back face of the wall to 1 foot beyond the end of the reinforcement and extending vertically from the top of the leveling pad to a minimum of 3 inches above the final reinforcement layer.

Use natural sand or a mixture of sand with gravel, crushed gravel, or crushed stone. Do not use foundry sand, bottom ash, blast furnace slag, crushed/recycled concrete, crushed/milled asphaltic concrete or other potentially corrosive material.

Provide material conforming to the following gradation requirements as per AASHTO T27.

Sieve Size	% by Weight Passing
1 inch	100
No. 40	0 - 60
No. 200	0 - 15

The material shall have a liquid limit not greater than 25, as per AASHTO T89, and a plasticity index not greater than 6, as per AASHTO T90. Provide the percent by weight, passing the #4 sieve.

In addition, backfill material Type A and Type B shall meet the following requirements.

Test	Method	Value
pH	AASHTO T-289	4.5-9.0
Sulfate content ^[1]	AASHTO T-290	200 ppm max.
Chloride content ^[1]	AASHTO T-291	100 ppm max.
Electrical Resistivity ^[1]	AASHTO T-288	3000 ohm-cm min.
Organic Content ^[1]	AASHTO T-267	1.0% max.
Angle of Internal Friction	AASHTO T-236 ^[2]	30 degrees min. (At 95.0% of maximum density and optimum moisture, per AASHTO T99, or as modified by C.2)

^[1] Requirement does not apply to walls with non-metallic reinforcement and non-metallic connectors.

^[2] If the amount of P-4 material is greater than 60%, use AASHTO 236 with a standard-size shear box. Test results of this method may allow the use of larger angles of internal friction, up to the maximum allowed by this specification. If the amount of P-4 material is less than or equal to 60%, two options are available to determine the angle of internal friction. The first method is to perform a fractured faces count, per ASTM D5821, on the R-4 material. If more than 90% of the material is fractured on one face and more than 50% is fractured on two faces, the material meets the specifications, and the angle of internal friction can be assumed to be 30 degrees. The second method allows testing all P-1" material, as per AASHTO T-236, with a large shear box. Test results of this second method may allow the use of larger angles of internal friction, up to the maximum allowed by this specification.

Prior to placement of the backfill, obtain and furnish to the engineer a certified report of test results that the backfill material complies with the requirements of this specification. Specify the method used to determine the angle of internal friction. This certified report of test shall be less than 6 months old. Tests will be performed by a certified independent laboratory. In addition, when backfill characteristics and/or sources change, provide a certified report of tests for the new backfill material. Additional certified report of tests are also required. These additional backfill tests may be completed at the time of material production or material placement, with concurrence of the engineer. If this additional testing is completed at the time of material production, complete testing for every 2000 cubic yards of backfill or portion thereof. If this additional testing is completed at the time of material placement, complete testing for every 2000 cubic yards of backfill, or portion thereof, used per wall. For the additional required testing for every 2000 cubic yards of backfill placement, if the characteristic of the backfill and/or the source has not changed then Angle of Internal Friction tests are not included in the additional required testing. All certified reports of test results shall be less than 6 months old and performed by a certified independent laboratory.

B.3.4 Soil Reinforcement

B.3.4.1 Geogrids

Geogrid supplied as reinforcing members shall be manufactured from long chain polymers limited to polypropylene, high-density polyethylene, polyaramid, and polyester. Geogrids shall form a uniform rectangular grid of bonded, formed, or fused polymer tensile strands crossing with a nominal right-angle orientation. The minimum grid aperture shall be 0.5 inch. The geogrid shall maintain dimension stability during handling, placing, and installation. The geogrid shall be insect, rodent, mildew, and rot resistant.

The geogrid shall be furnished in a protective wrapping that shall prevent exposure to ultraviolet radiation and damage from shipping or handling. The geogrid shall be kept dry until installed. Each roll shall be clearly marked to identify the material contained.

The wall supplier shall provide the nominal long-term design strength (T_{al}) and nominal long-term connection strength, T_{ac} as discussed below.

Nominal Long-Term Design Strength (T_{al})

The wall supplier shall supply the nominal long-term design strength (T_{al}) used in the design for each reinforcement layer and shall be determined by dividing the Ultimate Tensile Strength (T_{ult}) by the factors RF_{ID} , RF_{CR} , RF_D .

Hence,

$$T_{al} = \frac{T_{ult}}{RF_{ID} \times RF_{CR} \times RF_D}$$

where:

- T_{ult} = Ultimate tensile strength of the reinforcement determined from wide width tensile tests (ASTM D6637) for geogrids based on the minimum average roll value (MARV) for the product.
- RF_{ID} = Strength reduction factor to account for installation damage to the reinforcement. In no case shall RF_{ID} be less than 1.1.
- RF_{CR} = Strength reduction factor to prevent long-term creep rupture of the reinforcement. In no case shall RF_{CR} be less than 1.2.
- RF_D = Strength reduction factor to prevent rupture of the reinforcement due to chemical and biological degradation. In no case shall RF_D be less than 1.1.

Values for RF_{ID} , RF_{CR} , and RF_D shall be determined from product specific test results. Guidelines for determining RF_{ID} , RF_{CR} , and RF_D from product specific data are provided in FHWA Publication No. FHWA-NHI-10-024 and FHWA-NHI-10-025 "Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes".

Nominal Long-term Connection Strength T_{ac}

The nominal long term connection strength, T_{ac} , shall be based on laboratory geogrid connection tests between wall facing and geogrids. T_{ac} shall be as given below.

$$T_{ac} = \frac{T_{ult} * CR_{cr}}{RF_D}$$

where:

- T_{ac} = Nominal long-term reinforcement facing connection strength per unit reinforcement width at a specified confining pressure.
- T_{ult} = Ultimate tensile strength of the reinforcement for geogrids defined as the minimum average roll value (MARV) for the product.
- CR_{cr} = Long term connection strength reduction factor to account for reduced ultimate strength resulting from connection.
- RF_D = Strength reduction factor to prevent rupture of the reinforcement due to chemical and biological degradation.

T_{ac} shall be developed from the tests conducted by an independent laboratory on the same facing blocks and geogrids as proposed for the wall and shall cover a range of overburden pressures comparable to those anticipated in the proposed wall. The connection strength reduction factor CR_{cr} shall be determined according to long-term connection test as described in Appendix B of FHWA Publication No. FHWA-NHI 10-025 "Design and Construction of Mechanically Stabilized Earth Walls and Reinforced Soil Slopes". CR_{cr} may also be obtained from the short term connection test meeting the requirements of NCMA test method SRWU-1 in Simac et al 1993 or ASTM D4884.

The contractor shall provide a manufacturer's certificate that the Tult (MARV) of the supplied geogrid has been determined according to ASTM D4595 or ASTM D6637 as appropriate. Contractor shall also provide block to block and block to reinforcement connection test reports prepared and certified by an independent laboratory. Also provide calculations according to AASHTO LRFD, and using the results of laboratory tests, that the block-geogrid connections shall be capable of resisting 100% of the maximum tension load in the soil reinforcements at any level within the wall, for the design life of the wall system.

B.3.4.2 Galvanized Metal Reinforcement

In lieu of polymeric geogrid earth reinforcement, galvanized metal reinforcement may be used. Design and materials shall be according to AASHTO LRFD 11.10.6.4.2. The design life of steel soil reinforcements shall also comply with AASHTO LRFD. Steel soil reinforcement shall be prefabricated into single or multiple elements before galvanizing.

C Construction

C.1 Excavation and Backfill

Excavation and preparation of the foundation for the MSE wall and the leveling pad shall be according to standard spec 206. The volume of excavation covered is limited to the width of the reinforced mass and to the depth of the leveling pad unless shown or noted otherwise on the plan. At the end of each working day, provide good temporary drainage such that the backfill shall not become contaminated with run-off soil or water if it should rain. Do not stockpile or store materials or large equipment within 10 feet of the back of the wall.

Place backfill materials in the areas as indicated on the plans and as detailed in this specification. Backfill lifts shall be no more than 8-inches in depth, after compaction. Backfilling shall closely follow erection of each course of wall facing units.

Conduct backfilling operations in such a manner as to prevent damage or misalignment of the wall facing units, soil reinforcement, or other wall components. At no expense to the department, correct any such damage or misalignment as directed by the engineer. A field representative of the wall supplier shall be available during wall construction to provide technical assistance to the contractor and the engineer.

Place and compact the MSE backfill to the level of the next higher layer of MSE reinforcement before placing the MSE reinforcement or connecting it to the wall facing. Place and compact material beyond the reinforced soil zone to allow for proper compaction of material within the reinforced zone. The MSE reinforcement shall lay horizontally on top of the most recently placed and compacted layer of MSE backfill.

Do not operate tracked or wheeled equipment on the backfill within 3 feet from the back face of modular blocks. The engineer may order the removal of any large or heavy equipment that may cause damage or misalignment of the wall facing units.

C.2 Compaction

Compact wall backfill Type A with at least three passes of lightweight manually operated compaction equipment acceptable to the engineer.

Compact all backfill Type B as specified in standard spec 207.3.6. Compact the backfill Type B to 95.0% of maximum dry density as determined by AASHTO T-99 (modified to compute densities to the nearest 0.1 pcf).

Ensure adequate moisture is present in the backfill during placement and compaction to prevent segregation and to help achieve compaction.

Compaction of backfill within 3 feet of the back face of the wall should be accomplished using lightweight compaction devices. Use of heavy compaction equipment or vehicles should be avoided within 3 feet of the modular blocks. Do not use sheepfoot or padfoot rollers within the reinforced soil zone.

A minimum of 6 inches of backfill shall be placed over the MSE reinforcement prior to working above the reinforcement.

C.3 Wall Components

C.3.1 General

Erect wall facing units and other associated elements according to the wall manufacturer's construction guide and to the lines, elevations, batter, and tolerances as shown on the plans. Center the initial layer of facing units on the leveling pad; then level them and properly align them. Fill formed voids or openings in the facing units with wall backfill, Type A. Remove all debris on the top of each layer of facing units, before placing the next layer of facing units.

Install all pins, rods, clips, or other devices used to develop mechanical interlock between facing unit layers according to the manufacturer's directions.

The MSE reinforcement shall lay horizontally on the top of the most recently placed and compacted layer of MSE backfill. Bending of MSE reinforcement that result in a kink in the reinforcement shall not be allowed. If skewing of the reinforcement is required due to obstructions in the reinforced fill, the maximum skew angle shall not exceed 15 degrees from the normal position unless a greater angle is shown on the plans. The adequacy of the skewed reinforcement in such a case shall be addressed by supporting calculations.

C.3.2 Leveling Pad

Provide an unreinforced cast-in-place concrete leveling pad as shown on the plans. Vertical tolerances shall not exceed 3/4-inch when measured along a 10-foot straightedge. Allow the concrete to set at least 12 hours prior to placing wall facing units. The bottom row of wall facing units shall be horizontal and 100% of the unit surface shall bear on the leveling pad.

C.3.3 Soil Reinforcement

C.3.3.1 Geogrid Layers

Place soil reinforcement at the positions and to the lengths as indicated on the accepted shop drawings. Take care that backfill placement over the positioned soil reinforcement elements does not cause damage or misalignment of these elements. Correct any such damage or misalignment as directed by the engineer. Do not operate wheeled or tracked equipment directly on the soil reinforcement. A minimum cover of 6 inches is required before such operation is allowed.

Place and anchor geogrid material between wall unit layers in the same manner as used to determine the Geogrid Block-to-Connection Strength. Place the grid material so that the machine direction of the grid is perpendicular to the wall face. Each grid layer shall be continuous throughout the lengths indicated on the plans. Join grid strips with straps, rings, hooks, or other mechanical devices to prevent movement during backfilling operations. Prior to placing backfill on the grid, pull the grid taut and hold in position with pins, stakes or other methods approved by the engineer.

C.3.3.2 Steel Layers

Place the steel reinforcement full width in one piece as shown on the plans. No splicing will be allowed. Maintain elements in position during backfilling.

C.4 Quality Management Program

C.4.1 Quality Control Plan

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

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

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication process that will be used, and action time frames.
3. A list of source locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
4. Descriptions of stockpiling and hauling methods.

5. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.
6. Location of the QC laboratory, retained sample storage, and other documentation.
7. A summary of the locations and calculated quantities to be tested under this provision.
8. A proposed sequencing plan of wall construction operations and random test locations.

C.4.2 Quality Control Personnel

Perform the quality control sampling, testing, and documentation required under this provision using HTCP certified technicians. Have a HTCP Grading Technician I (GRADINGTEC-I); or Assistant Certified Technician, Grading (ACT-GRADING); or Aggregate Technician I (AGGTEC-I); or Assistant Certified Technician, Aggregate (ACT-AGG) present at each grading site during all wall backfill placement, compaction, and nuclear testing activities. Have a HTCP Nuclear Density Technician I (NUCDENSITYTEC-I) or Assistant Certified Technician, Nuclear Density Gauge Operator (ACT-NUC) perform field density and field moisture content testing.

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

C.4.3 Equipment

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

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

<https://wisconsin.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/default.aspx>

Ensure that the nuclear gauge manufacturer or an approved calibration service calibrates the gauge the same calendar year it is used on the project. Retain a copy of the calibration certificate with the gauge.

Conform to AASHTO T310 and CMM 8-15 for density testing and gauge monitoring methods.

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

C.4.4 Documentation

- (1) Document all observations, inspection records, and process adjustments daily. Submit test results to the department's project materials coordinator on the same day they become available.
- (2) Use forms provided in CMM Chapter 8. Note other information in a permanent field record and as a part of process control documentation enumerated in the contractor's quality control plan. Enter QC data and backfill material certified report results into the applicable materials reporting system (MRS) software within 5 business days after results are available.
- (3) Submit final testing records and other documentation to the engineer electronically within 10 business days after all contract-required information becomes available. The engineer may allow submission of scanned copies of hand-written documentation.

C.4.5 Quality Control (QC) Testing

Perform compaction testing on the backfill. Conform to CMM 8-15 for testing and gauge monitoring methods. Conduct testing at a minimum frequency of 1 test per 150 cubic yards of backfill, or major portion thereof in each lift. A minimum of one test for every lift is required. Deliver documentation of all compaction testing results to the engineer at the time of testing.

Perform 1 gradation test every 750 cubic yards of fill and one 5-point Proctor test (or as modified in C.2) every 2,250 cubic yards of fill. Provide the region split samples of both within 72 hours of sampling, at the region laboratory. Test sites shall be selected using ASTM Method D3665. Provide Proctor test results to the engineer within 48 hours of sampling. Provide gradation test results to the engineer within 24 hours of sampling.

C.4.6 Department Testing

C.4.6.1 General

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

C.4.6.2 Quality Verification (QV) Testing

- (1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in C.4.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.
- (2) The department will conduct QV tests at the minimum frequency of 30% of the required contractor density, Proctor and gradation tests.
- (3) The department will locate density tests and gradation samples randomly, at locations independent of the contractor's QC work. The department will split each Proctor and gradation QV sample, testing half for QV, and retaining the remaining half for 10 business days.
- (4) The department will conduct QV Proctor and gradation tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.
- (5) The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to this special provision, the department will take no further action. If density QV test results are nonconforming, the area shall be reworked until the density requirements of this special provision are met. If the gradation test results are nonconforming, standard spec 106.5 will apply. Differing QC and QV nuclear density values of more than 1.5 pcf will be investigated and resolved. QV density tests will be based on the appropriate QC Proctor test results, unless the QV and QC Proctor result difference is greater than 3.0 pcf. Differing QC and QV Proctor values of more than 3.0 pcf will be investigated and resolved.

C.4.6.3 Independent Assurance (IA)

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

- Split sample testing.
- Proficiency sample testing.
- Witnessing sampling and testing.
- Test equipment calibration checks.
- Reviewing required worksheets and control charts.
- Requesting that testing personnel perform additional sampling and testing.

If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in C.4.6.4.

C.4.6.4 Dispute Resolution

1. The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate sampling and testing procedures, and perform additional testing. Use ASTM E178 to evaluate potential statistically outlying data.
2. Production test results, and results from other process control testing, may be considered when resolving a dispute.

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

C.5 Geotechnical Information

Geotechnical data to be used in the design of the wall is given on the wall plan. After completing wall excavation of the entire reinforced soil zone, notify the department and allow the Regional Soils Engineer two working days to review the foundation.

D Measurement

The department will measure Wall Modular Block Mechanically Stabilized Earth by the square foot, acceptably completed. The department will compute the measured quantity from the theoretical pay limits the contract plans show. The department will make no allowance for wall area constructed above or below the theoretical pay limits. All work beyond the theoretical pay limits is incidental to the cost of work. The department will make no allowance for as-built quantities.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.001	Wall Modular Block Mechanically Stabilized Earth R-62-25	SF
SPV.0165.002	Wall Modular Block Mechanically Stabilized Earth R-62-26	SF

Payment is full compensation for supplying a design and shop drawings; preparing the site, including all necessary excavation and disposal of materials; supplying all necessary wall components to produce a functional wall system including cap, copings, leveling pad, and leveling pad steps; constructing the retaining system and providing temporary drainage; providing backfill, backfilling, compacting, developing/completing/documenting the quality management program, and performing compaction testing.

The department will pay separately for parapets, traffic barriers, railings, and other items above the wall cap or coping.

50. Pavement Cleanup Project 1646-08-72, Item SPV.0170.001.

A Description

This special provision describes cleanup of dust and debris from pavements within and adjacent to the job site.

B Materials

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

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

Use a vacuum-type sweeper as the primary sweeper, except as specified herein or approved by the engineer.

C Construction

Keep all pavements, curb lanes and gutters both closed and open to public traffic within the job-site boundaries free of dust and debris generated from any activity under the contract. Keep all pavements, curb lanes and gutters adjacent to the project free of dust and debris that are affected by land disturbing, dust generating activities, as defined in the contractor's dust control implementation plan.

Conduct sweepings as the engineer directs or approves, to deal with dust problems that might arise during off-work hours or emergencies. Provide the engineer with a contact person available at all times to respond to requests for emergency sweeping. Respond to emergency sweeping requests within 4 hours.

If the vacuum-type sweeper breaks down, a mechanical broom sweeper may be substituted for no more than 24 hours total elapsed time. Repair the vacuum-type sweeper within that 24 hours or substitute a vacuum-type sweeper.

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

D Measurement

The department will measure Pavement Cleanup Project 1646-08-72 by the full 100-foot station acceptably completed, measured along the roadway centerline or reference line with each full 100-foot station starting and ending at a +00 station. If two or more roadways occur, the department will measure along the centerline or reference line of each roadway. For divided highways, the department will extend measurement units for each roadway, in width, from 5 feet outside the grading limit of that roadway to a line mid-way between the reference lines or centerlines for each roadway.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0170.001	Pavement Cleanup Project 1646-08-72	STA

Payment is full compensation for surveillance, mobilization, sweeping, and disposing of materials.

51. Trimming Tree, Item SPV.0170.100.

A Description

This special provision describes the tree trimming of existing trees overhanging the WisDOT right-of-way or within temporary easements.

B (Vacant)

C Construction

Maintain according to standard spec 201. In addition, trim low hanging branches within the WisDOT right-of-way or temporary easements up to an approximate elevation of 20 feet above existing grade for the designated trees in the plans.

D Measurement

The department will measure Trimming Tree by the full 100-foot survey station, acceptably completed, measured along the roadway centerline with each full 100-foot station starting and ending at a station evenly divisible by 100.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0170.100	Trimming Tree	STA

Payment is full compensation for furnishing all tree trimming required under this section and performed within the trees designated on the plans; handling, hauling, piling, trimming, chipping, wound treatment, re-handling, and disposing of waste and debris at an off-site location.

52. Excavation, Hauling, and Disposal of Contaminated Soil, Item SPV.0195.001.

A Description

A.1 General

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

LaCrosse County Landfill
3200 Berlin Drive
LaCrosse, WI 54601
(608) 785-9572

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

A.2 Notice to the Contractor – Contaminated Soil Locations

The department completed testing for soil contamination within this project where excavation is required. Previous investigations indicate that contamination is present at the following locations:

- Petroleum Contamination:
 - Site 3: Station 147+00'WB' to 148+00'WB', from 15 feet right of the reference line to construction limits on the right, from 5 to greater than 10 feet bgs.
 - Site 6: Station 140+75'WB' to 141+50'WB' from 15 feet right of the reference line to construction limits on the right, from 5 to greater than 10 feet bgs. and Station 9+75'SE' to 10+25'SE' from 15 feet right of the reference line to construction limits on the right, from 5 to greater than 10 feet bgs.
 - Site 9: Station 137+25'WB' to 137+70'WB', from 15 feet right of the reference line to construction limits on the right, from 5 to greater than 10 feet bgs. and Station 10+00'FS' to 10+35'FS', from reference line to construction limits on the left, from 5 to greater than 10 feet bgs.
- Metals Contamination:
 - Site 10: Station 135+50'WB' to 136+00'WB', from 15 feet left of the reference line to construction limits on the left, from 5 to greater than 10 feet bgs.

Contaminated soil and/or underground storage tanks (USTs) may be encountered at other locations within the construction limits. If contaminated soil and/or USTs are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. Contaminated soil at other locations shall be managed by the contractor under this contract. USTs will be removed by others.

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

Name: Stephan Vetsch
Wisconsin DOT-SW Region
Address: 3550 Mormon Coulee Rd
Lacrosse, WI 54601
Phone: (608) 785-9049
E-mail: stephan.vetsch@dot.wi.gov

Name: Dan Haak
TRC Environmental Corporation
Address: 708 Heartland Trail, Suite 3000
Madison, WI 53717
Phone: (608) 826-3628 office, (608) 886-7423 mobile
E-mail: DHaak@trccompanies.com

A.3 Coordination

Coordinate work under this contract with the environment consultant:

Consultant: TRC Environmental Corporation
Address: 708 Heartland Trail, Suite 3000, Madison, WI 53717
Contact: Dan Haak
Phone: (608) 826-3628 office, (608) 886-7423 mobile

e-mail: DHaak@trccompanies.com

The role of the environmental consultant will be limited to:

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

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

Identify the WDNR-approved bioremediation and disposal facility that will be used for disposal of contaminated soils and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the bioremediation and disposal facility.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed. Do not pump or haul contaminated groundwater offsite without specific approval from the environmental consultant. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

A.4 Protection of Groundwater Monitoring Wells

Groundwater monitoring wells may be present within the construction limits. Protect all groundwater monitoring wells to maintain their integrity. Adjust wells that do not conflict with utilities, structures, curb and gutter, etc. to be flush with the final grade. For wells that conflict with the previously mentioned items, notify the environmental consultant, and coordinate with the environmental consultant for the abandonment or adjustment of the wells by others. The environmental consultant will provide maps indicating the locations of all known monitoring wells, if requested by the contractor.

A.5 Excavation Management Plan Approval

The excavation management plan for this project has been designed to minimize the off-site disposal of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR's concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding the investigations, including waste characterization within the project limits, contact Steve Vetsch with the department, at (608) 785-9049.

A.6 Health and Safety Requirements for Workers Remediating Contamination

Supplement standard spec 107.1 with the following:

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

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

Disposal of contaminated soil at the bioremediation and disposal facility is subject to the facility's safety policies.

B (Vacant)

C Construction

Supplement standard spec 205.3 with the following:

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

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

On the basis of the results of such field-screening, the material will be designated for disposal as follows:

- Excavation Common consisting of clean soil and/or clean construction and demolition fill (such as clean soil, boulders, concrete, reinforced concrete, bituminous pavement, bricks, building stone, and unpainted or untreated wood), which under NR 500.08 are exempt materials, or
- Low-level contaminated material (PID readings less than 10 ppm and no observation of staining or petroleum odor, or based on existing analytical data) for reuse as fill within the construction limits as allowed, or
- Petroleum contaminated soil (significant petroleum odor, staining, and/or PID readings greater than 10 ppm) for off-site treatment and disposal at the WDNR-licensed bioremediation facility, or
- Potentially contaminated soil for temporary stockpiling and additional characterization prior to disposal.

Directly load and haul soil designated by the environmental consultant for offsite disposal to the WDNR-approved facility. Verify that vehicles used to transport contaminated material are licensed for such activity according to applicable state and federal regulations. Use loading and hauling practices that are appropriate to prevent any spills or releases of contaminated soils or residues. Prior to transport, sufficiently dewater soils so as not to contain free liquids.

When material is encountered outside the above-identified limits of known contamination that appears to have been impacted with petroleum or chemical products, or when other obvious potentially contaminated materials are encountered or material exhibits characteristics of industrial-type wastes, such as fly ash, foundry sand, and cinders, or when underground storage tanks are encountered, suspend excavation in that area and notify the engineer.

D Measurement

The department will measure Excavation, Hauling, and Disposal of Contaminated Soil in tons of contaminated soil accepted by the disposal facility as documented by weight tickets generated by the facility. Load tickets must be delivered to the engineer within 10 business days of the date on which the soil was accepted by the facility.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.001	Excavation, Hauling, and Disposal of Contaminated Soil	TON

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

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 PROVISIONS 5 FUEL COST ADJUSTMENT

A Description

Fuel Cost Adjustments will be applied to partial and final payments for work items categorized in Section B as a payment to the contractor or a credit to the department. ASP-5 shall not apply to any force account work.

B Categories of Work Items

The following items and Fuel Usage Factors shall be used to determine Fuel Cost Adjustments:

(1) Earthwork.		Unit	Gal. Fuel Per Unit
205.0100	Excavation Common	CY	0.23
205.0200	Excavation Rock	CY	0.39
205.0400	Excavation Marsh	CY	0.29
208.0100	Borrow	CY	0.23
208.1100	Select Borrow	CY	0.23
209.1100	Backfill Granular Grade 1	CY	0.23
209.1500	Backfill Granular Grade 1	Ton	0.115
209.2100	Backfill Granular Grade 2	CY	0.23
209.2500	Backfill Granular Grade 2	Ton	0.115
350.0102	Subbase	CY	0.28
350.0104	Subbase	Ton	0.14
350.0115	Subbase 6-Inch	SY	0.05
350.0120	Subbase 7-Inch	SY	0.05
350.0125	Subbase 8-Inch	SY	0.06
350.0130	Subbase 9-Inch	SY	0.07
350.0135	Subbase 10-Inch	SY	0.08
350.0140	Subbase 11-Inch	SY	0.09
350.0145	Subbase 12-Inch	SY	0.09

C Fuel Index

A Current Fuel Index (CFI) in dollars per gallon will be established by the Department of Transportation for each month. The CFI will be the price of No. 2 fuel oil, as reported in U.S. Oil Week, using the first issue dated that month. The CFI will be the average of prices quoted for Green Bay, Madison, Milwaukee and Minneapolis.

The base Fuel Index (BFI) for this contract is \$2.55 per gallon.

D Computing the Fuel Cost Adjustment

The engineer will compute the ratio CFI/BFI each month. If the ratio falls between 0.85 and 1.15, inclusive, no fuel adjustment will be made for that month. If the ratio is less than 0.85 a credit to the department will be computed. If the ratio is greater than 1.15 additional payment to the contractor will be computed. Credit or additional payment will be computed as follows:

- (1) The engineer will estimate the quantity of work done in that month under each of the contract items categorized in Section B.
- (2) The engineer will compute the gallons of fuel used in that month for each of the contract items categorized in Section B by applying the unit fuel usage factors shown in Section B.
- (3) The engineer will summarize the total gallons (Q) of fuel used in that month for the items categorized in Section B.
- (4) The engineer will determine the Fuel Cost Adjustment credit or payment from the following formula:

$$FA = \frac{CFI}{BFI} - 1 \times Q \times BFI$$

(plus is payment to contractor; minus is credit to the department)

Where	FA	=	Fuel Cost Adjustment (plus or minus)
	CFI	=	Current Fuel Index
	BFI	=	Base Fuel Index
	Q	=	Monthly total gallons of fuel

E Payment

A Fuel Cost Adjustment credit to the department will be deducted as a dollar amount each month from any sums due to the contractor. A Fuel Cost Adjustment payment to the contractor will be made as a dollar amount each month.

Upon completion of the work under the contract, any difference between the estimated quantities and the final quantities will be determined. An average CFI, calculated by averaging the CFI for all months that fuel cost adjustment was applied, will be applied to the quantity differences. The average CFI shall be applied in accordance with the procedure set forth in Section D.

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

Make the following revisions to the standard specifications:

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.
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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.
 5. 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 ^[1]	
SEIVE	COARSE AGGREGATE (% PASSING by WEIGHT) AASHTO No. 67
2-inch	-
1 1/2-inch	-
1-inch	100
3/4-inch	90 – 100
1/2-inch	-
3/8-inch	20 – 55
No. 4	0 – 10
No. 8	0 – 5
No. 16	-
No. 30	-
No. 50	-
No. 100	-
No. 200	<=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:

<u>ITEM NUMBER</u>	<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_{mb}) of the compacted mixture according to WTM T166.
 - Maximum specific gravity (G_{mm}) according to WTM T209.
 - Air voids (V_a) 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.

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^[1]	
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

^[1] 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 1st Tier and DBE Payments During Construction

1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
5. 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 paul.ndon@dot.wi.gov within 5 days of payment receipt to be logged manually.

***Additionally, for information on Subcontractor Sublet assignments, Subcontractor Payments and Payment Tracking, please refer to the CRCS Payment and Sublets manual at:

<https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payments-sublets-manual.pdf>

ADDITIONAL SPECIAL PROVISION 9

Electronic Certified Payroll or Labor Data Submittal

- (1) Use the department's Civil Rights Compliance System (CRCS) to electronically submit certified payroll reports for contracts with federal funds and labor data for contracts with state funds only. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:
<https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx>
- (2) Ensure that all tiers of subcontractors, including all trucking firms, either submit their weekly certified payroll reports (contracts with federal funds) or labor data (contracts with state funds only) electronically through CRCS. These payrolls or labor data are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.
- (3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin their submittals. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Paul Ndon at (414) 438-4584 to schedule the training.
- (4) The department will reject all paper submittals for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.
- (5) Firms wishing to export payroll/labor data from their computer system into CRCS should have their payroll coordinator contact Paul Ndon at paul.ndon@dot.wi.gov. Not every contractor's payroll system is capable of producing export files. For details, see Section 4.8 CPR Auto Submit (Data Mapping) on pages 49-50; 66-71 of the CRCS Payroll Manual at:
<https://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf>

NON-DISCRIMINATION PROVISIONS

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

- a. Withholding payments to the contractor under the contract until the contractor complies; and/or
- b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

BUY AMERICA PROVISION

Buy America (as documented in [88 FR 57750 \(2 CFR part 184 and 200\)](#) from the Office of Management and Budget: [Federal Register: Guidance for Grants and Agreements](#)) 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 [88 FR 57750 \(2 CFR part 184 and 200\)](#) and as referenced in CMM 228.5) must comply with Buy America. All manufacturing process of construction materials must occur in the United States.

[88 FR 55817 \(DOT-OST-2022-0124\)](#) 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 project¹; or
- The total amount of Federal financial assistance applied to the project, through awards or subaward, is below \$500,000²

The contractor shall take actions and provide documentation conforming to CMM 228.5 to ensure compliance with this Buy America provision.

<https://wisconsin.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://wisconsin.gov/Documents/formdocs/dt4567.docx>

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

¹ 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 assistance 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).



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

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	201.0105 Clearing	34.000 STA	_____.	_____.
0004	201.0205 Grubbing	34.000 STA	_____.	_____.
0006	203.0100 Removing Small Pipe Culverts	4.000 EACH	_____.	_____.
0008	204.0100 Removing Concrete Pavement	21,700.000 SY	_____.	_____.
0010	204.0110 Removing Asphaltic Surface	913.000 SY	_____.	_____.
0012	204.0115 Removing Asphaltic Surface Butt Joints	1,100.000 SY	_____.	_____.
0014	204.0120 Removing Asphaltic Surface Milling	8,260.000 SY	_____.	_____.
0016	204.0150 Removing Curb & Gutter	13,730.000 LF	_____.	_____.
0018	204.0155 Removing Concrete Sidewalk	5,780.000 SY	_____.	_____.
0020	204.0170 Removing Fence	293.000 LF	_____.	_____.
0022	204.0195 Removing Concrete Bases	24.000 EACH	_____.	_____.
0024	204.0210 Removing Manholes	12.000 EACH	_____.	_____.
0026	204.0220 Removing Inlets	38.000 EACH	_____.	_____.
0028	204.0231 Removing Building (station) 001. 163+80WB	1.000 EACH	_____.	_____.
0030	204.0241 Site Clearance (parcel) 001. Parcel 118	1.000 EACH	_____.	_____.
0032	204.0245 Removing Storm Sewer (size) 001. 12- INCH	562.000 LF	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

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
0034	204.0245 Removing Storm Sewer (size) 002. 15-INCH	1,036.000 LF	_____.	_____.
0036	204.0245 Removing Storm Sewer (size) 003. 18-INCH	1,777.000 LF	_____.	_____.
0038	204.0245 Removing Storm Sewer (size) 004. 24-INCH	65.000 LF	_____.	_____.
0040	204.0280 Sealing Pipes	1.000 EACH	_____.	_____.
0042	204.9060.S Removing (item description) 001. Westby Locker and Meats Sign	1.000 EACH	_____.	_____.
0044	204.9090.S Removing (item description) 001. Removing or Abandoning Conduit	3,025.000 LF	_____.	_____.
0046	204.9090.S Removing (item description) 002. Removing Electrical Conductors from Existing Conduit	4,495.000 LF	_____.	_____.
0048	205.0100 Excavation Common	72,549.000 CY	_____.	_____.
0050	213.0100 Finishing Roadway (project) 001. 1646-08-70	1.000 EACH	_____.	_____.
0052	305.0110 Base Aggregate Dense 3/4-Inch	3,840.000 TON	_____.	_____.
0054	305.0120 Base Aggregate Dense 1 1/4-Inch	38,300.000 TON	_____.	_____.
0056	312.0110 Select Crushed Material	42,573.000 TON	_____.	_____.
0058	405.0100 Coloring Concrete WisDOT Red	331.000 CY	_____.	_____.
0060	415.0080 Concrete Pavement 8-Inch	42,500.000 SY	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0062	415.0210 Concrete Pavement Gaps	24.000 EACH	_____.	_____.
0064	415.2010 Concrete Truck Apron 12-inch	1,960.000 SY	_____.	_____.
0066	415.4100 Concrete Pavement Joint Filling	43,950.000 SY	_____.	_____.
0068	415.6000.S Rout and Seal	1,550.000 LF	_____.	_____.
0070	416.0610 Drilled Tie Bars	179.000 EACH	_____.	_____.
0072	416.0620 Drilled Dowel Bars	34.000 EACH	_____.	_____.
0074	450.4000 HMA Cold Weather Paving	350.000 TON	_____.	_____.
0076	455.0605 Tack Coat	422.000 GAL	_____.	_____.
0078	460.2000 Incentive Density HMA Pavement	720.000 DOL	1.00000	720.00
0080	460.6224 HMA Pavement 4 MT 58-28 S	1,090.000 TON	_____.	_____.
0082	465.0105 Asphaltic Surface	2,370.000 TON	_____.	_____.
0084	465.0110 Asphaltic Surface Patching	57.000 TON	_____.	_____.
0086	465.0120 Asphaltic Surface Driveways and Field Entrances	415.000 TON	_____.	_____.
0088	465.0125 Asphaltic Surface Temporary	4,370.000 TON	_____.	_____.
0090	465.0310 Asphaltic Curb	5,690.000 LF	_____.	_____.
0092	465.0315 Asphaltic Flumes	115.000 SY	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

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
0094	502.3210 Pigmented Surface Sealer	310.000 SY	_____.	_____.
0096	511.1100 Temporary Shoring	750.000 SF	_____.	_____.
0098	513.8016 Railing Steel Pedestrian Type C3	483.000 LF	_____.	_____.
0100	520.1015 Apron Endwalls for Culvert Pipe 15-Inch	4.000 EACH	_____.	_____.
0102	520.1024 Apron Endwalls for Culvert Pipe 24-Inch	2.000 EACH	_____.	_____.
0104	520.2012 Culvert Pipe Temporary 12-Inch	37.000 LF	_____.	_____.
0106	520.2015 Culvert Pipe Temporary 15-Inch	10.000 LF	_____.	_____.
0108	520.2024 Culvert Pipe Temporary 24-Inch	13.000 LF	_____.	_____.
0110	520.3315 Culvert Pipe Class III-A 15-Inch	127.000 LF	_____.	_____.
0112	520.3324 Culvert Pipe Class III-A 24-Inch	15.000 LF	_____.	_____.
0114	520.8000 Concrete Collars for Pipe	21.000 EACH	_____.	_____.
0116	521.3112 Culvert Pipe Corrugated Steel 12-Inch	65.000 LF	_____.	_____.
0118	522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	2.000 EACH	_____.	_____.
0120	522.1015 Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	4.000 EACH	_____.	_____.
0122	522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	1.000 EACH	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

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
0124	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	1.000 EACH	_____.	_____.
0126	522.2314 Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 14x23-Inch	85.000 LF	_____.	_____.
0128	522.2614 Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch	2.000 EACH	_____.	_____.
0130	601.0405 Concrete Curb & Gutter 18-Inch Type A	240.000 LF	_____.	_____.
0132	601.0409 Concrete Curb & Gutter 30-Inch Type A	16,400.000 LF	_____.	_____.
0134	601.0411 Concrete Curb & Gutter 30-Inch Type D	2,000.000 LF	_____.	_____.
0136	601.0580 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R	2,010.000 LF	_____.	_____.
0138	601.0582 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type T	204.000 LF	_____.	_____.
0140	601.0600 Concrete Curb Pedestrian	652.000 LF	_____.	_____.
0142	602.0410 Concrete Sidewalk 5-Inch	88,600.000 SF	_____.	_____.
0144	602.0505 Curb Ramp Detectable Warning Field Yellow	748.000 SF	_____.	_____.
0146	602.0605 Curb Ramp Detectable Warning Field Radial Yellow	306.000 SF	_____.	_____.
0148	602.0810 Concrete Driveway 6-Inch	3,220.000 SY	_____.	_____.
0150	602.0860 Concrete Driveway HES 6-Inch	36.000 SY	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

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
0152	602.1500 Concrete Steps	110.000 SF	_____.	_____.
0154	603.8000 Concrete Barrier Temporary Precast Delivered	12.500 LF	_____.	_____.
0156	603.8125 Concrete Barrier Temporary Precast Installed	12.500 LF	_____.	_____.
0158	606.0200 Riprap Medium	46.000 CY	_____.	_____.
0160	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	657.000 LF	_____.	_____.
0162	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	2,591.000 LF	_____.	_____.
0164	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	1,016.000 LF	_____.	_____.
0166	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	958.000 LF	_____.	_____.
0168	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	20.000 LF	_____.	_____.
0170	608.0512 Storm Sewer Pipe Reinforced Concrete Class V 12-Inch	3,064.000 LF	_____.	_____.
0172	608.0515 Storm Sewer Pipe Reinforced Concrete Class V 15-Inch	131.000 LF	_____.	_____.
0174	608.0548 Storm Sewer Pipe Reinforced Concrete Class V 48-Inch	6.000 LF	_____.	_____.
0176	608.3012 Storm Sewer Pipe Class III-A 12-Inch	90.000 LF	_____.	_____.
0178	611.0430 Reconstructing Inlets	1.000 EACH	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0180	611.0530 Manhole Covers Type J	35.000 EACH	_____.	_____.
0182	611.0612 Inlet Covers Type C	1.000 EACH	_____.	_____.
0184	611.0624 Inlet Covers Type H	106.000 EACH	_____.	_____.
0186	611.0639 Inlet Covers Type H-S	14.000 EACH	_____.	_____.
0188	611.0642 Inlet Covers Type MS	1.000 EACH	_____.	_____.
0190	611.0645 Inlet Covers Type MS-A	1.000 EACH	_____.	_____.
0192	611.0652 Inlet Covers Type T	6.000 EACH	_____.	_____.
0194	611.2004 Manholes 4-FT Diameter	24.000 EACH	_____.	_____.
0196	611.2005 Manholes 5-FT Diameter	7.000 EACH	_____.	_____.
0198	611.2006 Manholes 6-FT Diameter	2.000 EACH	_____.	_____.
0200	611.2008 Manholes 8-FT Diameter	2.000 EACH	_____.	_____.
0202	611.3004 Inlets 4-FT Diameter	29.000 EACH	_____.	_____.
0204	611.3220 Inlets 2x2-FT	2.000 EACH	_____.	_____.
0206	611.3225 Inlets 2x2.5-FT	1.000 EACH	_____.	_____.
0208	611.3230 Inlets 2x3-FT	91.000 EACH	_____.	_____.
0210	611.3901 Inlets Median 1 Grate	2.000 EACH	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

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
0212	611.8120.S Cover Plates Temporary	61.000 EACH	_____.	_____.
0214	612.0406 Pipe Underdrain Wrapped 6-Inch	520.000 LF	_____.	_____.
0216	616.0700.S Fence Safety	2,000.000 LF	_____.	_____.
0218	618.0100 Maintenance and Repair of Haul Roads (project) 001. 1646-08-72	1.000 EACH	_____.	_____.
0220	619.1000 Mobilization	1.000 EACH	_____.	_____.
0222	620.0200 Concrete Median Blunt Nose	170.000 SF	_____.	_____.
0224	620.0300 Concrete Median Sloped Nose	470.000 SF	_____.	_____.
0226	624.0100 Water	847.000 MGAL	_____.	_____.
0228	625.0100 Topsoil	39,200.000 SY	_____.	_____.
0230	627.0200 Mulching	40,800.000 SY	_____.	_____.
0232	628.1504 Silt Fence	8,400.000 LF	_____.	_____.
0234	628.1520 Silt Fence Maintenance	24,700.000 LF	_____.	_____.
0236	628.1905 Mobilizations Erosion Control	15.000 EACH	_____.	_____.
0238	628.1910 Mobilizations Emergency Erosion Control	9.000 EACH	_____.	_____.
0240	628.2006 Erosion Mat Urban Class I Type A	2,500.000 SY	_____.	_____.
0242	628.2008 Erosion Mat Urban Class I Type B	350.000 SY	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

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
0244	628.7005 Inlet Protection Type A	150.000 EACH	_____.	_____.
0246	628.7010 Inlet Protection Type B	33.000 EACH	_____.	_____.
0248	628.7015 Inlet Protection Type C	160.000 EACH	_____.	_____.
0250	628.7020 Inlet Protection Type D	23.000 EACH	_____.	_____.
0252	628.7504 Temporary Ditch Checks	1,320.000 LF	_____.	_____.
0254	628.7555 Culvert Pipe Checks	30.000 EACH	_____.	_____.
0256	628.7560 Tracking Pads	12.000 EACH	_____.	_____.
0258	629.0210 Fertilizer Type B	24.600 CWT	_____.	_____.
0260	630.0140 Seeding Mixture No. 40	510.000 LB	_____.	_____.
0262	630.0200 Seeding Temporary	240.000 LB	_____.	_____.
0264	630.0500 Seed Water	920.000 MGAL	_____.	_____.
0266	631.0300 Sod Water	260.000 MGAL	_____.	_____.
0268	631.1000 Sod Lawn	11,300.000 SY	_____.	_____.
0270	633.5200 Markers Culvert End	13.000 EACH	_____.	_____.
0272	634.0612 Posts Wood 4x6-Inch X 12-FT	2.000 EACH	_____.	_____.
0274	634.0614 Posts Wood 4x6-Inch X 14-FT	116.000 EACH	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

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
0276	634.0616 Posts Wood 4x6-Inch X 16-FT	31.000 EACH	_____.	_____.
0278	634.0618 Posts Wood 4x6-Inch X 18-FT	8.000 EACH	_____.	_____.
0280	634.0620 Posts Wood 4x6-Inch X 20-FT	2.000 EACH	_____.	_____.
0282	637.2210 Signs Type II Reflective H	771.390 SF	_____.	_____.
0284	637.2220 Signs Type II Reflective SH	52.000 SF	_____.	_____.
0286	637.2230 Signs Type II Reflective F	339.250 SF	_____.	_____.
0288	638.2102 Moving Signs Type II	15.000 EACH	_____.	_____.
0290	638.2602 Removing Signs Type II	145.000 EACH	_____.	_____.
0292	638.3000 Removing Small Sign Supports	118.000 EACH	_____.	_____.
0294	638.4000 Moving Small Sign Supports	2.000 EACH	_____.	_____.
0296	642.5401 Field Office Type D	1.000 EACH	_____.	_____.
0298	643.0300 Traffic Control Drums	8,767.000 DAY	_____.	_____.
0300	643.0420 Traffic Control Barricades Type III	10,324.000 DAY	_____.	_____.
0302	643.0500 Traffic Control Flexible Tubular Marker Posts	78.000 EACH	_____.	_____.
0304	643.0600 Traffic Control Flexible Tubular Marker Bases	78.000 EACH	_____.	_____.
0306	643.0650.S Traffic Channelizing Curb System	1,148.000 LF	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0308	643.0705 Traffic Control Warning Lights Type A	15,108.000 DAY	_____.	_____.
0310	643.0715 Traffic Control Warning Lights Type C	6,436.000 DAY	_____.	_____.
0312	643.0900 Traffic Control Signs	37,633.000 DAY	_____.	_____.
0314	643.0920 Traffic Control Covering Signs Type II	6.000 EACH	_____.	_____.
0316	643.1050 Traffic Control Signs PCMS	21.000 DAY	_____.	_____.
0318	643.1070 Traffic Control Cones 42-Inch	57,286.000 DAY	_____.	_____.
0320	643.3165 Temporary Marking Line Paint 6-Inch	39,315.000 LF	_____.	_____.
0322	643.3180 Temporary Marking Line Removable Tape 6-Inch	47,185.000 LF	_____.	_____.
0324	643.3265 Temporary Marking Line Paint 10-Inch	327.000 LF	_____.	_____.
0326	643.3350 Temporary Marking Crosswalk Removable Tape 6-inch	877.000 LF	_____.	_____.
0328	643.3505 Temporary Marking Arrow Paint	2.000 EACH	_____.	_____.
0330	643.3605 Temporary Marking Word Paint	1.000 EACH	_____.	_____.
0332	643.3850 Temporary Marking Stop Line Removable Tape 18-Inch	85.000 LF	_____.	_____.
0334	643.5000 Traffic Control	1.000 EACH	_____.	_____.
0336	644.1410 Temporary Pedestrian Surface Asphalt	1,750.000 SF	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0338	644.1601 Temporary Pedestrian Curb Ramp	68.000 DAY	_____.	_____.
0340	644.1605 Temporary Pedestrian Detectable Warning Field	60.000 SF	_____.	_____.
0342	644.1810 Temporary Pedestrian Barricade	7,542.000 LF	_____.	_____.
0344	645.0120 Geotextile Type HR	91.000 SY	_____.	_____.
0346	645.0220 Geogrid Type SR	57,800.000 SY	_____.	_____.
0348	646.2020 Marking Line Epoxy 6-Inch	3,200.000 LF	_____.	_____.
0350	646.4020 Marking Line Epoxy 10-Inch	330.000 LF	_____.	_____.
0352	646.5020 Marking Arrow Epoxy	8.000 EACH	_____.	_____.
0354	646.5120 Marking Word Epoxy	2.000 EACH	_____.	_____.
0356	646.5220 Marking Symbol Epoxy	3.000 EACH	_____.	_____.
0358	646.6120 Marking Stop Line Epoxy 18-Inch	381.000 LF	_____.	_____.
0360	646.6220 Marking Yield Line Epoxy 18-Inch	64.000 EACH	_____.	_____.
0362	646.6466 Cold Weather Marking Epoxy 6-Inch	23,600.000 LF	_____.	_____.
0364	646.6470 Cold Weather Marking Epoxy 10-Inch	500.000 LF	_____.	_____.
0366	646.7120 Marking Diagonal Epoxy 12-Inch	650.000 LF	_____.	_____.
0368	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	2,900.000 LF	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

Federal ID(s): N/A

SECTION: 0001 Contract Items

Alt Set ID: Alt Mbr ID:

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0370	646.8120 Marking Curb Epoxy	1,710.000 LF	_____.	_____.
0372	646.8220 Marking Island Nose Epoxy	5.000 EACH	_____.	_____.
0374	646.8320 Marking Parking Stall Epoxy	373.000 LF	_____.	_____.
0376	650.4500 Construction Staking Subgrade	17,845.000 LF	_____.	_____.
0378	650.5000 Construction Staking Base	856.000 LF	_____.	_____.
0380	650.5500 Construction Staking Curb Gutter and Curb & Gutter	2,105.000 LF	_____.	_____.
0382	650.7000 Construction Staking Concrete Pavement	16,989.000 LF	_____.	_____.
0384	650.8000 Construction Staking Resurfacing Reference	4,566.000 LF	_____.	_____.
0386	650.9000 Construction Staking Curb Ramps	62.000 EACH	_____.	_____.
0388	650.9500 Construction Staking Sidewalk (project) 001. 1646-08-72	1.000 EACH	_____.	_____.
0390	650.9911 Construction Staking Supplemental Control (project) 001. 1646-08-72	1.000 EACH	_____.	_____.
0392	650.9920 Construction Staking Slope Stakes	19,748.000 LF	_____.	_____.
0394	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	8,000.000 LF	_____.	_____.
0396	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	40.000 LF	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

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
0398	652.0325 Conduit Rigid Nonmetallic Schedule 80 2-Inch	1,555.000 LF	_____.	_____.
0400	653.0164 Pull Boxes Non-Conductive 24x42-Inch	35.000 EACH	_____.	_____.
0402	654.0101 Concrete Bases Type 1	4.000 EACH	_____.	_____.
0404	654.0105 Concrete Bases Type 5	48.000 EACH	_____.	_____.
0406	654.0106 Concrete Bases Type 6	1.000 EACH	_____.	_____.
0408	654.0230 Concrete Control Cabinet Bases Type L30	1.000 EACH	_____.	_____.
0410	655.0610 Electrical Wire Lighting 12 AWG	7,275.000 LF	_____.	_____.
0412	655.0615 Electrical Wire Lighting 10 AWG	13,441.000 LF	_____.	_____.
0414	655.0625 Electrical Wire Lighting 6 AWG	16,408.000 LF	_____.	_____.
0416	655.0630 Electrical Wire Lighting 4 AWG	24,612.000 LF	_____.	_____.
0418	656.0201 Electrical Service Meter Breaker Pedestal (location) 001. Electrical Service Meter Breaker Pedestal (CB300)	1.000 EACH	_____.	_____.
0420	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	11.000 EACH	_____.	_____.
0422	657.0322 Poles Type 5-Aluminum	10.000 EACH	_____.	_____.
0424	657.0327 Poles Type 6-Aluminum	1.000 EACH	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

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
0426	657.0610 Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	17.000 EACH	_____.	_____.
0428	659.1120 Luminaires Utility LED B	17.000 EACH	_____.	_____.
0430	659.2130 Lighting Control Cabinets 120/240 30-Inch	1.000 EACH	_____.	_____.
0432	690.0150 Sawing Asphalt	18,630.000 LF	_____.	_____.
0434	690.0250 Sawing Concrete	2,290.000 LF	_____.	_____.
0436	715.0720 Incentive Compressive Strength Concrete Pavement	12,750.000 DOL	1.00000	12,750.00
0438	740.0440 Incentive IRI Ride	6,457.000 DOL	1.00000	6,457.00
0440	999.1501.S Crack and Damage Survey	1.000 EACH	_____.	_____.
0442	SPV.0060 Special 001. Adjusting Sanitary Manholes	45.000 EACH	_____.	_____.
0444	SPV.0060 Special 002. Adjusting Sanitary Cleanout Frost Sleeve	2.000 EACH	_____.	_____.
0446	SPV.0060 Special 003. Hydrant Removal	5.000 EACH	_____.	_____.
0448	SPV.0060 Special 004. Valve Removal	2.000 EACH	_____.	_____.
0450	SPV.0060 Special 005. Water Main Gate Valve 6-Inch	5.000 EACH	_____.	_____.
0452	SPV.0060 Special 006. Fire Hydrant 6-Inch	5.000 EACH	_____.	_____.
0454	SPV.0060 Special 007. Adjusting Water Valves	66.000 EACH	_____.	_____.



Proposal Schedule of Items

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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
0456	SPV.0060 Special 008. Adjusting Water Service Curb Box	74.000 EACH	_____.	_____.
0458	SPV.0060 Special 009. Install City Furnished Street Lighting Unit	38.000 EACH	_____.	_____.
0460	SPV.0060 Special 010. Remove and Replace Concrete Lattice Pavers	1.000 EACH	_____.	_____.
0462	SPV.0060 Special 011. Removing Electrified Sign, BlackJack Auto Sales	1.000 EACH	_____.	_____.
0464	SPV.0060 Special 012. Electrical Service Meter Breaker Pedestal Special (CB400)	1.000 EACH	_____.	_____.
0466	SPV.0060 Special 013. Temporary Wood Poles for Lighting	3.000 EACH	_____.	_____.
0468	SPV.0060 Special 014. Temporary Luminaires and Arms	2.000 EACH	_____.	_____.
0470	SPV.0060 Special 100. Inlet 5-FT Diameter	2.000 EACH	_____.	_____.
0472	SPV.0060 Special 101. Inlet 6-FT Diameter	2.000 EACH	_____.	_____.
0474	SPV.0060 Special 102. Inlet 8-FT Diameter	1.000 EACH	_____.	_____.
0476	SPV.0060 Special 103. Inlet Covers Type S Special	2.000 EACH	_____.	_____.
0478	SPV.0060 Special 104. Inlet Covers Flat Temporary	18.000 EACH	_____.	_____.
0480	SPV.0060 Special 105. Temporary Inlet	6.000 EACH	_____.	_____.
0482	SPV.0090 Special 001. Reveal Curb	255.000 LF	_____.	_____.



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

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
0484	SPV.0090 Special 002. Concrete Curb & Gutter 3-Inch Sloped 36-Inch Type R	110.000 LF	_____.	_____.
0486	SPV.0090 Special 003. Remove and Replace Vinyl Fencing	24.000 LF	_____.	_____.
0488	SPV.0090 Special 004. Temporary Aerial Cable	300.000 LF	_____.	_____.
0490	SPV.0090 Special 100. Pipe Underdrain (6-Inch) with Geotextile Fabric and Aggregate	1,253.000 LF	_____.	_____.
0492	SPV.0165 Special 001. Wall Modular Block Mechanically Stabilized Earth R-62-25	2,405.000 SF	_____.	_____.
0494	SPV.0165 Special 002. Wall Modular Block Mechanically Stabilized Earth R-62-26	477.000 SF	_____.	_____.
0496	SPV.0170 Special 001. Pavement Cleanup Project 1646-08-72	180.000 STA	_____.	_____.
0498	SPV.0170 Special 100. Trimming Tree	5.000 STA	_____.	_____.
0500	SPV.0195 Special 001. Excavation, Hauling, and Disposal of Contaminated Soil	500.000 TON	_____.	_____.
Section: 0001			Total:	_____.
			Total Bid:	_____.

PLEASE ATTACH ADDENDA HERE



Wisconsin Department of Transportation

January 18, 2024

**Division of Transportation Systems
Development**

Bureau of Project Development
4822 Madison Yards Way, 4th Floor South
Madison, WI 53705

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

NOTICE TO ALL CONTRACTORS:

ASP-6 Addendum #01

Letting of February 13, 2024

Attached is a copy of the revised ASP-6. This ASP-6 replaces ASP-6 in all proposals in the February 13, 2024 Letting.

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractors.

Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

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.
 5. 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 ^[1]	
SEIVE	COARSE AGGREGATE (% PASSING by WEIGHT) AASHTO No. 67
2-inch	-
1 1/2-inch	-
1-inch	100
3/4-inch	90 – 100
1/2-inch	-
3/8-inch	20 – 55
No. 4	0 – 10
No. 8	0 – 5
No. 16	-
No. 30	-
No. 50	-
No. 100	-
No. 200	<=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:

<u>ITEM NUMBER</u>	<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_{mb}) of the compacted mixture according to WTM T166.
 - Maximum specific gravity (G_{mm}) according to WTM T209.
 - Air voids (V_a) 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 subplot 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^[1]	
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

^[1] 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.



Wisconsin Department of Transportation

Division of Transportation Systems Development

Bureau of Project Development
4822 Madison Yards Way, 4th Floor South
Madison, WI 53705

February 2, 2024

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

NOTICE TO ALL CONTRACTORS:

Proposal #02: 1646-08-72
C Westby, N Main Street Project
High Echo Lane to Locust Street
USH 14
Vernon County

Letting of February 13, 2024

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

Special Provisions:

Added Special Provisions	
Article No.	Description
53	Research and Locate Existing Land Parcel and Right of Way Monuments, Item SPV.0060.015
54	Verify and Replace Existing Land Parcel and Right of Way Monuments, Item SPV.0060.016

Schedule of Items:

Added Bid Item Quantities					
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Quantity Added	Proposal Total After Addendum
SPV.0060.015	Research and Locate Existing Land Parcel and Right of Way Monuments	EACH	0	123	123
SPV.0060.016	Verify and Replace Existing Land Parcel and Right of Way Monuments	EACH	0	123	123

Plan Sheets:

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
568 – 569	Plan and Profile (revised slope intercepts)
574 – 575	Plan and Profile (revised slope intercepts)

Added Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of why sheet was added)
510 A	Miscellaneous Quantities (new R/W items)
569 A	Plan and Profile (revised slope intercepts)

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

1646-08-72

February 2, 2024

Special Provisions

53. Research and Locate Existing Land Parcel and Right of Way Monuments, Item SPV.0060.015.

A Description

This special provision describes researching and locating existing land parcel or boundary monuments and Right of Way monuments, as depicted on the transportation project plat(s) or traditional plat sheet(s) located in permanent easements, temporary easements, or construction permit areas, which may be lost or disturbed by construction operations.

B (Vacant)

C Construction

Perform work by, or under the direction of, a professional land surveyor licensed in the State of Wisconsin.

Prior to construction, research, locate and document monuments located in permanent easements, temporary easements and construction permit areas. Establish coordinate ties to the monuments accurate to current minimum state survey standards.

Prepare a monument location map showing the type of monuments found and their coordinates. The transportation project plat (TPP) is acceptable as a base map for the monument location map. Provide a copy of the monument location map to the engineer and region right-of-way plat coordinator.

Verify and reset monument locations after construction is complete under the item titled Verify and Replace Existing Land Parcel and Right of Way Monuments.

D Measurement

The department will measure the Research and Locate Existing Land Parcel and Right of Way Monuments bid item by each unit acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.015	Research and Locate Existing Land Parcel and Right of Way Monuments	EACH

Payment is full compensation for all research, field survey, locating, and data recording necessary to locate and establish coordinates for existing monuments within the construction limits prior to construction; furnishing a professional land surveyor; preparing, annotating and delivering the monument location map.

54. Verify and Replace Existing Land Parcel and Right of Way Monuments, Item SPV.0060.016.

A Description

This special provision describes verifying the final location of, and replacing existing land parcel or boundary monuments and Right of Way Monuments, previously located under the item Research and Locate Existing Land Parcel and Right of Way Monuments, that are lost or disturbed by construction operations.

This provision does not relinquish the contractor's responsibility of standard spec 107.11.

B Materials

Provide minimum sized replacement monuments as follows:

- Locations outside of pavement areas:
 - 1-inch inside diameter by 24 inch long iron pipe
 - 3/4-inch diameter by 24 inch long rod or rebar
- Locations in asphalt pavement areas:
 - Survey spike
 - Mag nail
- Locations in concrete pavement areas:
 - Drilled hole
 - Chiseled mark

C Construction

Perform work by, or under the direction of, a professional land surveyor licensed in the State of Wisconsin.

After construction is completed, verify the location of all monuments previously located with the item Research and Locate Existing Land Parcel Monuments. Replace any monuments that were disturbed or destroyed to current minimum state survey standards.

Prepare a monument location map showing the type of monuments originally found, the type of replacement monuments used to replace the disturbed or destroyed monuments, and monument coordinates. The transportation project plat (TPP) is acceptable as a base map for the monument location map. Create the location map with a PDF editing tool such as Adobe or Bluebeam. The monument location map shall explicitly state that the replaced monuments are not being certified as actual land parcel or boundary monuments, only that evidence of monuments were found and replaced. Attach a cover letter to the location map that contains a brief synopsis of the work completed. The cover letter shall be signed, stamped, and dated by a professional land surveyor. Provide a copy of the monument location map and cover letter to the engineer, the county surveyor, and the region plat coordinator.

D Measurement

The department will measure the Verify and Replace Existing Land Parcel and Right of Way Monuments bid item by each unit acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.016	Verify and Replace Existing Land Parcel and Right of Way Monuments	EACH

Payment is full compensation for all survey work necessary to verify the location of all monuments previously located under the item Research and Locate Existing Land Parcel Monuments; replacing monuments that were disturbed or destroyed from their original location; furnishing monuments or other necessary tools; furnishing a professional land surveyor; preparing, annotating and delivering the monument location map and cover letter.

Schedule of Items

Attached, dated February 2, 2024, are the revised Schedule of Items Page 17.

Plan Sheets

The following 8½ x 11-inch sheets are attached and made part of the plans for this proposal:
 Revised: 568 – 569, and 574 – 575.
 Added: 510A and 569A.

END OF ADDENDUM

Addendum No. 01
ID 1646-08-72
Added Sheet 510A
February 2, 2024

LAND PARCEL AND RIGHT OF WAY MONUMENTS

SPV.0060.016

SPV.0060.015

RESEARCH AND LOCATE
EXISTING LAND PARCEL
AND RIGHT OF WAY MONUMENTS
(EACH)

VERIFY AND REPLACE
EXISTING LAND PARCEL
AND RIGHT OF WAY MONUMENTS
(EACH)

PROJECT CATEGORY LOCATION STATION-STATION

1646-08-72 0010

BOP - SOUTH ST	90'+28'WB' - 108'+12'WB'	3	3
SOUTH ST - COON PRARE RD	108'+12'WB' - 119'+35'WB'	10	10
COON PRARE RD - BLACK RIVER AVE	119'+35'WB' - 148'+64'WB'	57	57
BLACK RIVER AVE - WASHINGTON ST	148'+64'WB' - 156'+21'WB'	12	12
WASHINGTON ST - STH 27	156'+21'WB' - 163'+08'WB'	11	11
STH 27 - FRONTAGE RD	163'+08'WB' - 169'+80'WB'	23	23
FRONTAGE RD - EOP	169'+80'WB' - 180'+01'WB'	7	7
CATEGORY 0010 TOTAL		123	123

PROJECT 1646-08-72 TOTAL 123

PROJECT NO: 1646-08-72

HWY: USH 14

COUNTY: VERNON

MISCELLANEOUS QUANTITIES

SHEET 510A

E

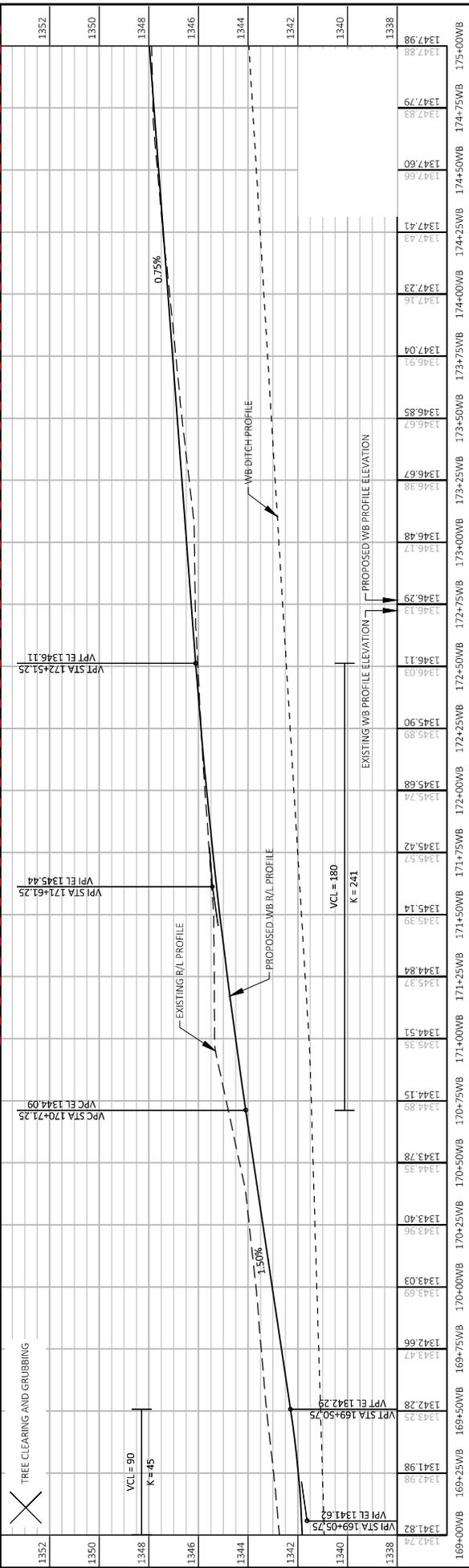
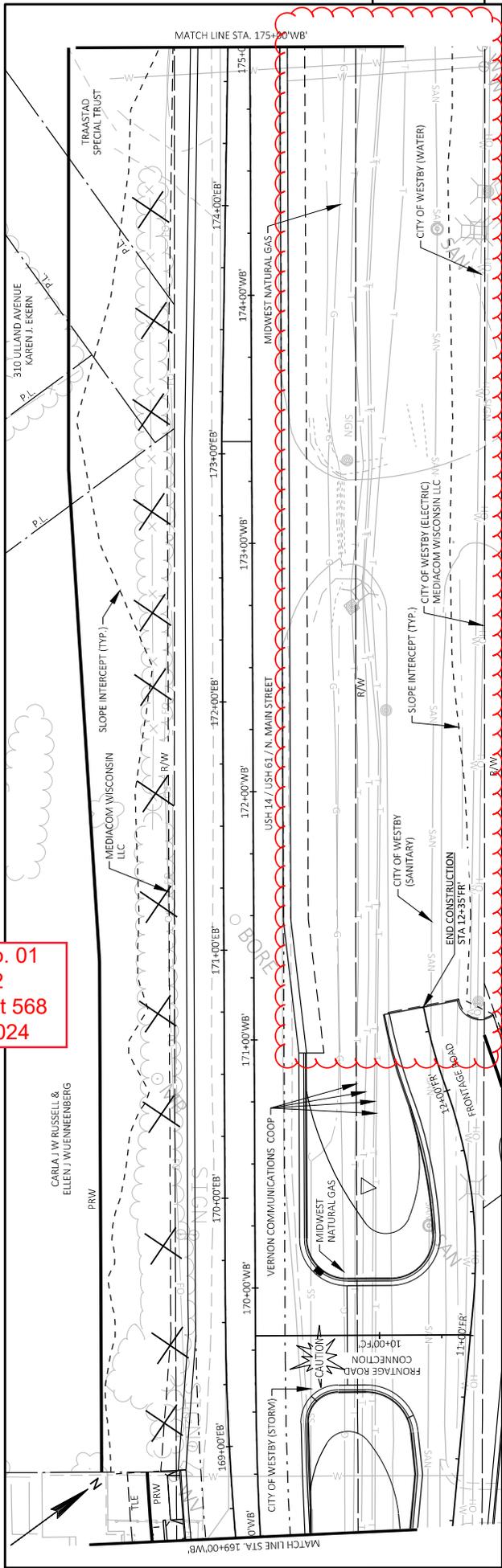
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REV. DATE:

REV. DATE:

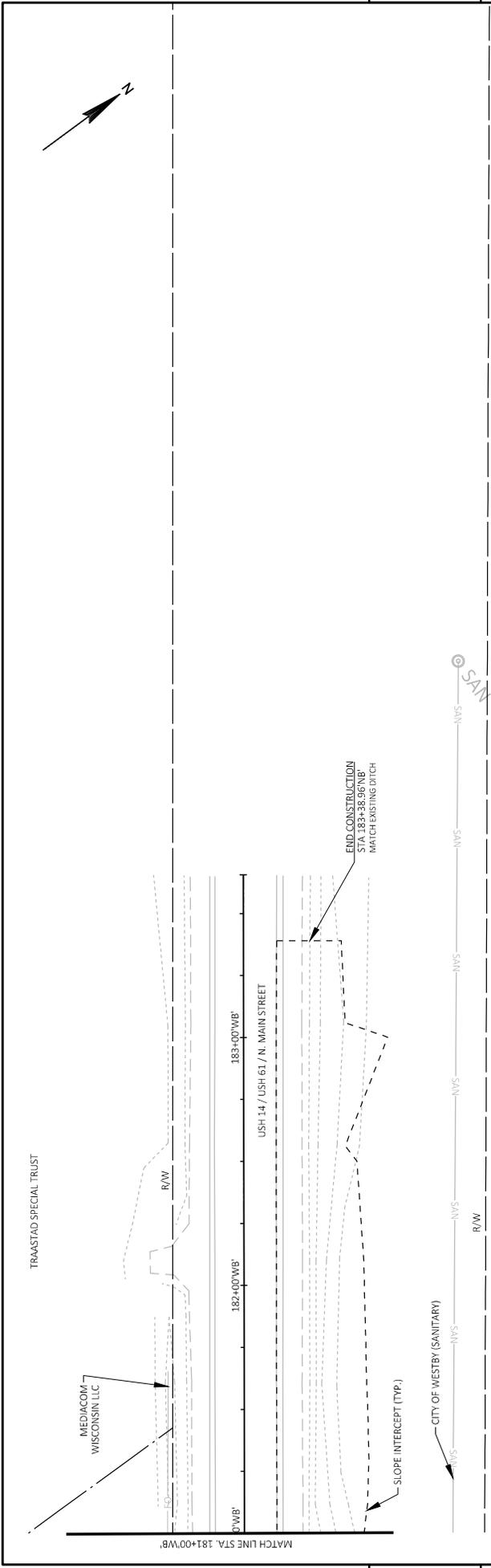
PRINT DATE: January 31, 2024

Addendum No. 01
 ID 1646-08-72
 Revised Sheet 568
 February 2, 2024



Station	Elevation	Profile Type
1347.82	1341.82	VPI STA 169+05.75
1347.98	1342.98	
1341.98	1341.98	
1342.25	1342.25	VPI STA 169+50.75
1342.28	1342.28	VPI STA 169+50.75
1343.78	1343.78	
1344.89	1344.89	VPC STA 170+71.25
1344.15	1344.15	
1345.35	1345.35	
1344.51	1344.51	
1345.37	1345.37	
1344.84	1344.84	
1345.14	1345.14	
1345.57	1345.57	
1345.42	1345.42	
1345.74	1345.74	
1345.68	1345.68	
1345.90	1345.90	
1346.03	1346.03	
1346.11	1346.11	VPT STA 172+51.25
1346.13	1346.13	
1346.29	1346.29	
1346.17	1346.17	
1346.48	1346.48	
1346.38	1346.38	
1346.67	1346.67	
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1346.85	1346.85	
1346.85	1346.85	
1347.04	1347.04	
1347.16	1347.16	
1347.29	1347.29	
1347.43	1347.43	
1347.41	1347.41	
1347.66	1347.66	
1347.60	1347.60	
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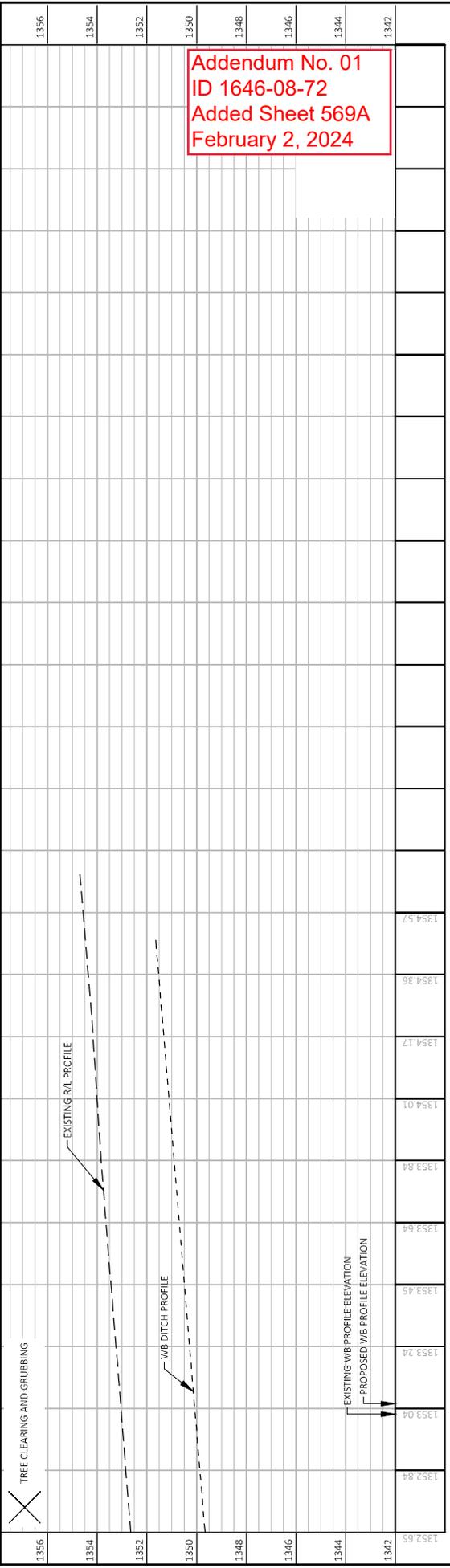
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 COUNTY: VERNON
 PLAN AND PROFILE: USH 14 WB
 SHEET 568
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 PLOT DATE: 1/31/2024 2:21 PM
 PLOT BY: KE ENGINEERING
 PLOT NAME: USH 14 WB
 PLOT SCALE: 1 IN=40 FT
 WISDOT/CADSW SHEET 44



5

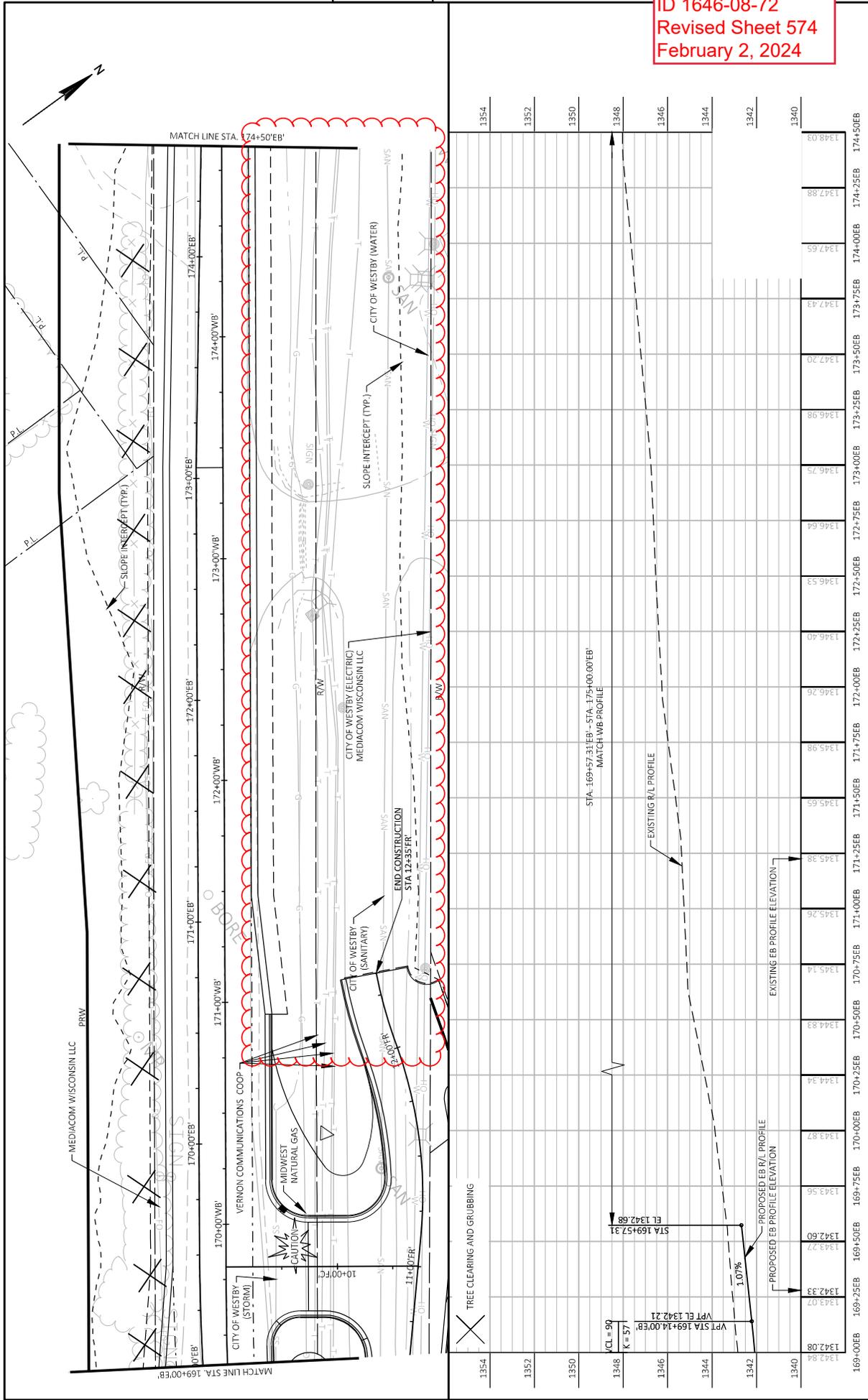
5

Addendum No. 01
 ID 1646-08-72
 Added Sheet 569A
 February 2, 2024



1356	181+00WB	181+25WB	181+50WB	181+75WB	182+00WB	182+25WB	182+50WB	182+75WB	183+00WB	183+25WB	183+50WB	183+75WB	184+00WB	184+25WB	184+50WB	184+75WB	185+00WB	185+25WB	185+50WB	185+75WB	186+00WB	186+25WB	186+50WB	186+75WB	187+00WB
1354																									
1352																									
1350																									
1348																									
1346																									
1344																									
1342																									

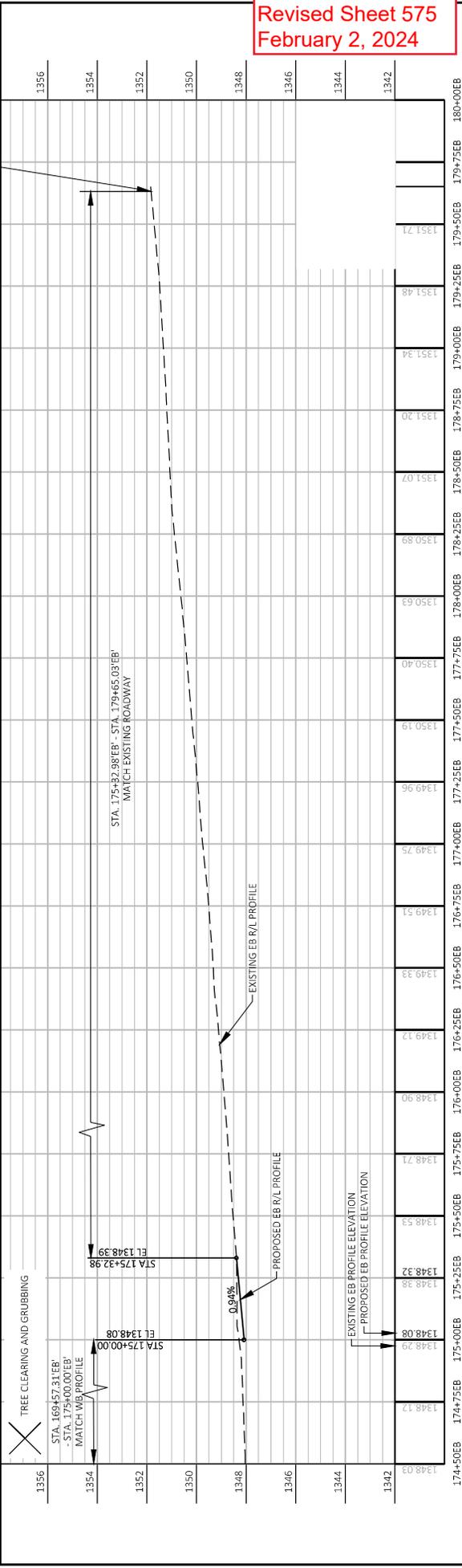
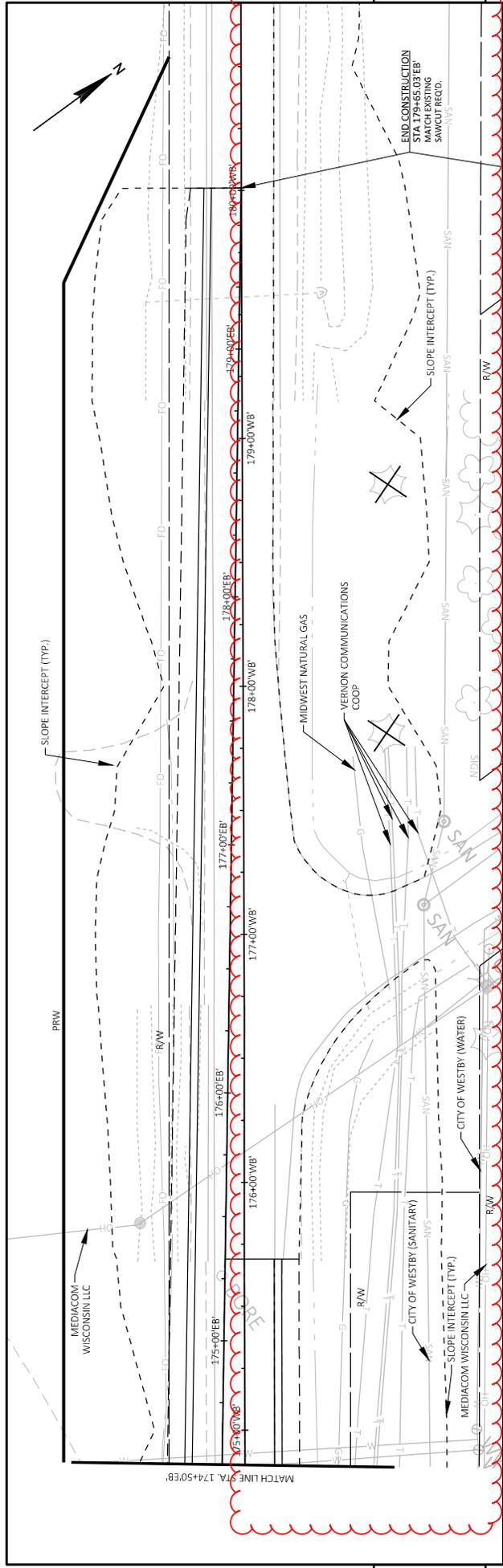
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 COUNTY: VERNON
 HWY: USH 14
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 PLOT BY: KE ENGINEERING
 PLOT NAME: USH 14 WB
 PLOT SCALE: 1 IN=40 FT
 SHEET 569A
 WISDOT/CADDS SHEET 44



STATION	ELEVATION	PROPOSED EB R/L PROFILE	EXISTING EB PROFILE ELEVATION
169+00EB	1342.08		
169+25EB	1342.33		
169+50EB	1342.60		
170+00EB	1343.07		
170+25EB	1343.56		
170+50EB	1344.34		
171+00EB	1344.83		
171+25EB	1345.14		
171+50EB	1345.26		
172+00EB	1345.38		
172+25EB	1345.65		
172+50EB	1346.00		
173+00EB	1346.26		
173+25EB	1346.40		
173+50EB	1346.53		
174+00EB	1346.64		
174+25EB	1346.75		
174+50EB	1346.88		
174+50EB	1347.20		
174+50EB	1347.43		
174+50EB	1347.65		
174+50EB	1347.88		
174+50EB	1348.03		

PROJECT NO: 1648-08-72
 COUNTY: VERNON
 HWY: USH 14
 PLAN AND PROFILE: USH 14 EB
 PLOT BY: KL ENGINEERING
 PLOT DATE: 1/31/2024 2:56 PM
 PLOT NAME: LAYOUT NAME: SHEET 15
 PLOT SCALE: 1 IN=40 FT
 SHEET 574
 WISDOT/CADD SHEET 44

Addendum No. 01
 ID 1646-08-72
 Revised Sheet 575
 February 2, 2024



Station	Elevation	Profile Type
1348.03	174+50EB	EXISTING EB R/L PROFILE
1348.12	174+75EB	EXISTING EB R/L PROFILE
1348.29	175+00EB	EXISTING EB R/L PROFILE
1348.38	175+25EB	EXISTING EB R/L PROFILE
1348.32	175+25EB	PROPOSED EB R/L PROFILE
1348.38	175+25EB	EXISTING EB R/L PROFILE
1348.39	175+32.98	PROPOSED EB R/L PROFILE
1348.39	175+32.98	EXISTING EB R/L PROFILE
1348.71	175+75EB	EXISTING EB R/L PROFILE
1348.90	176+00EB	EXISTING EB R/L PROFILE
1349.12	176+25EB	EXISTING EB R/L PROFILE
1349.33	176+50EB	EXISTING EB R/L PROFILE
1349.51	176+75EB	EXISTING EB R/L PROFILE
1349.75	177+00EB	EXISTING EB R/L PROFILE
1349.96	177+25EB	EXISTING EB R/L PROFILE
1350.19	177+50EB	EXISTING EB R/L PROFILE
1350.40	177+75EB	EXISTING EB R/L PROFILE
1350.63	178+00EB	EXISTING EB R/L PROFILE
1350.89	178+25EB	EXISTING EB R/L PROFILE
1351.07	178+50EB	EXISTING EB R/L PROFILE
1351.20	178+75EB	EXISTING EB R/L PROFILE
1351.34	179+00EB	EXISTING EB R/L PROFILE
1351.48	179+25EB	EXISTING EB R/L PROFILE
1351.71	179+50EB	EXISTING EB R/L PROFILE
1352.00	179+75EB	EXISTING EB R/L PROFILE
1352.30	180+00EB	EXISTING EB R/L PROFILE

PROJECT NO: 1648-08-72
 COUNTY: VERNON
 HWY: USH 14
 PLAN AND PROFILE: USH 14 EB
 SHEET: 575
 FILE NAME: G:\WDOTSW\2024\00\CIVIL\30\SHETS\PLAN\57501D_LP-EB-MANLINE.DWG
 LAYOUT NAME: SHEET 16
 PLOT DATE: 1/31/2024 2:56 PM
 PLOT BY: KL ENGINEERING
 PLOT NAME: USH 14 EB
 PLOT SCALE: 1 IN=40 FT
 WISDOT/CADDS SHEET 44



Proposal Schedule of Items

Proposal ID: 20240213002 Project(s): 1646-08-72

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
0484	SPV.0090 Special 002. Concrete Curb & Gutter 3-Inch Sloped 36-Inch Type R	110.000 LF	_____.	_____.
0486	SPV.0090 Special 003. Remove and Replace Vinyl Fencing	24.000 LF	_____.	_____.
0488	SPV.0090 Special 004. Temporary Aerial Cable	300.000 LF	_____.	_____.
0490	SPV.0090 Special 100. Pipe Underdrain (6-Inch) with Geotextile Fabric and Aggregate	1,253.000 LF	_____.	_____.
0492	SPV.0165 Special 001. Wall Modular Block Mechanically Stabilized Earth R-62-25	2,405.000 SF	_____.	_____.
0494	SPV.0165 Special 002. Wall Modular Block Mechanically Stabilized Earth R-62-26	477.000 SF	_____.	_____.
0496	SPV.0170 Special 001. Pavement Cleanup Project 1646-08-72	180.000 STA	_____.	_____.
0498	SPV.0170 Special 100. Trimming Tree	5.000 STA	_____.	_____.
0500	SPV.0195 Special 001. Excavation, Hauling, and Disposal of Contaminated Soil	500.000 TON	_____.	_____.
0502	SPV.0060 Special 015. Research and Locate Existing Land Parcel and Right of Way Monuments	123.000 EACH	_____.	_____.
0504	SPV.0060 Special 016. Verify and Replace Existing Land Parcel and Right of Way Monuments	123.000 EACH	_____.	_____.

Section: 0001

Total: _____.

Total Bid: _____.

