HIGHWAY WORK PROPOSAL

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

Proposal Number: 013

COUNTY STATE PROJECT **FEDERAL** PROJECT DESCRIPTION **HIGHWAY** Dane 5992-10-16 WISC 2023094 C Madison, Atwood Avenue; Fair Oaks LOC STR Ave To Cottage Grove Road Dane 5992-10-17 WISC 2023095 C Madison, Atwood Avenue; Fair Oaks **NON HWY** Ave To Cottage Grove Road 5992-10-18 N/A C Madison, Atwood Avenue; Fair Oaks LOC STR Dane Ave To Cottage Grove Road

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: \$360,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: December 13, 2022 Time (Local Time): 11:00 am	Firm Name, Address, City, State, Zip Code SAMPLE
Contract Completion Time November 01, 2023	NOT FOR BIDDING PURPOSES
Assigned Disadvantaged Business Enterprise Goal 5%	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.

this proposal bid.

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

Subscribed and sworn to before me this date ______

(Signature, Notary Public, State of Wisconsin)

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

(Print or Type Bidder Name)

(Date Commission Expires)

(Bidder Title)

Notary Seal

Notary Seal	
Type of Work: For Depart	tment Use Only
Excavation, Base, HMA Pavement, Curb and Gutter, Sidewalk, Sig Street Lighting, Traffic Signals, Structure Construction, Multi-Use F	gns, Pavement Marking, Storm Sewer, Sanitary Sewer, Water Main, Path Construction, Structure Maintenance, Retaining Wall
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://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 PM local time on the Thursday before the letting. Check the department's web site after 5:00 PM local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid ExpressTM 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 ExpressTM on-line bidding exchange by following the instructions provided at the www.bidx.com web site or by contacting:

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

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

https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

- or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the department's web site listed above or by picking up the addenda at the Bureau of Highway Construction, 4th floor, 4822 Madison Yards Way, Madison, WI, during regular business hours.
- (7) Addenda posted after 5:00 PM on the Thursday before the letting will be emailed to the eligible bidders for that proposal. All eligible bidders shall acknowledge receipt of the addenda whether they are bidding on the proposal or not. Not acknowledging receipt may jeopardize the awarding of the project.

B. Submitting Electronic Bids

B.1 On the Internet

- (1) Do the following before submitting the bid:
 - 4. Have a properly executed annual bid bond on file with the department.
 - 5. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:
 - 1. Download the latest schedule of items reflecting all addenda from the Bid Express TM web site.
 - 2. Use ExpediteTM software to enter a unit price for every item in the schedule of items.
 - 3. Submit the bid according to the requirements of ExpediteTM software and the Bid ExpressTM 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

other files on the diskette or CD ROM.

- (1) Download the latest schedule of items from the Wisconsin pages of the Bid Express web site reflecting the latest addenda posted on the department's web site at:
 - https://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx
 - Use ExpediteTM 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 ExpressTM web site to assure that the schedule of items is prepared properly.
- (2) Staple an 8 1/2 by 11 inch printout of the Expedite □ □ generated schedule of items to the other proposal documents submitted to the department as a part of the bidder's sealed bid. As a separate submittal, not in the sealed bid envelop but due at the same time and place as the sealed bid, also provide the Expedite TM generated schedule of items on a 3 1/2 inch computer diskette or CD ROM. Label each diskette or CD ROM with the bidder's name, the 4 character department-assigned bidder identification code from the top of the bidding proposal, and a list of the proposal numbers included on that diskette or CD ROM as indicated in the following example:

Bidder Name BN00

Proposals: 1, 12, 14, & 22

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

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

B Waiver of Electronic Submittal

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

PROPOSAL BID BOND

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

PRINCIPAL

(Company Name) (Affix C	orporate Seal)		
(Signature and Title)	•		
(Company Name)			
(Signature and Title)			
(Company Name)			
(Signature and Title)		(Name of Surety) (Affix Seal)	
(Company Name)		(Signature of Attorney-in-Fact)	
(Signature and Title)			
NOTA	RY FOR PRINCIPAL	NOTARY FO	OR SURETY
	(Date)	(Da	te)
State of Wisconsin)	State of Wisconsin)
) ss. County))ss. _County)
On the above date, this instrunamed person(s).	ument was acknowledged before me by the	On the above date, this instrument w named person(s).	as acknowledged before me by the
(Signature, Nota	ary Public, State of Wisconsin)	(Signature, Notary Publ	ic, State of Wisconsin)
(Print or Type Name	Notary Public, State of Wisconsin)	(Print or Type Name, Notary Public, State of Wisconsin)	
(Date	Commission Expires)	(Date Commis	sion Expires)

Notary Seal Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

DT1305 8/2003

Wisconsin Department of Transportation

(Date)

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

(Signature of Authorized Contractor Representative)

LIST OF SUBCONTRACTORS

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

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

Name of Subcontractor	Class of Work	Estimated Value

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

Instructions for Certification

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

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

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

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

Special Provisions

Table of Contents

	Article	Description	Page #
1.	General		6
2.	Scope of Work		6
3.	Prosecution and Progress		6
4.	Traffic		8
5.	Holiday and Special Event Work Restricti	ons.	20
6.	Utilities		20
7.	Municipality Acceptance of Sanitary Sewe	er and Water Main Construction	28
8.	Referenced Construction Specifications		28
9.	Railroad Insurance and Coordination - W	isconsin and Southern Railroad Company	28
10.	Railroad Insurance and Coordination - W	isconsin and Southern Railroad Company	29
11.	Information to Bidders, U.S. Army Corps	of Engineers Section 404 Permit	30
12.	Information to Bidders, WPDES General	Construction Storm Water Discharge Permit	30
13.	Environmental Protection, Dewatering		31
14.	Environmental Protection, Aquatic Exotic	Species Control.	31
15.	Construction Over or Adjacent to Navigat	ole Waters	32
16.	Erosion Control Structures.		32
17.	Dust Abatement		32
18.	Erosion Control		32
19.	Preservation of Existing Trees		33
20.	Archaeological Site – Memorial Park Site		34
21.	Public Convenience and Safety		35
22.	Coordination with Businesses and Reside	ents	35
23.	Signing		35
24.	General Provisions for Storm Sewer		35
25.	General Provisions for City of Madison Sa	anitary Sewer	37
26.	General Provisions for City of Monona Sa	nitary Sewer Construction	41
27.	General Provisions for City of Madison W	ater Main Construction	41
28.	General Provisions for Conduit Installation	n	43
29.	General Provisions for City Traffic Signals	5	43
30.	General Provisions for City Electric Syste	ms	44
31.	Removing Vehicular Gate, Item 204.9060).S.01	46
32.	Removing Sidewalk Trench Drain, Item 2	04.9060.S.02	47
33.	Removing Stone Retaining Wall, Item 204	4.9090.S.01	47
34.	Removing Metal Railing, Item 204.9090.5	3.02	47
35.	Stamping Colored Concrete, Item 405.10	00	48
36.	Abutment Construction		49
37.	Precast Concrete Box Culvert, 3 FT x 6 F	T, Item 504.2000.S.01	49

38.	Prefabricated Steel Truss Pedestrian Bridge B-13-864 LRFD, Item 506.8006.S.01	50
39.	Sawing Pavement Deck Preparation Areas, Item 509.0310.S.	52
40.	Concrete Masonry Deck Repair, Item 509.2100.S.	53
41.	Polymer Overlay, Item 509.5100.S.	53
42.	Removing Polymer Overlay B-13-254, Item 509.9015.S	58
43.	Concrete Staining R-13-336, Item 517.1010.S.01	59
44.	Inlet Covers Type H; Type H-S	61
45.	Manhole Covers Type J-Special	61
46.	Adjusting Manhole Covers	61
47.	Cover Plates Temporary, Item 611.8120.S.	62
48.	Pipe Grates, Item 611.9800.S.	62
49.	Insulation Board Polystyrene, 2-Inch, Item 612.0902.S.01	63
50.	Fence Safety, Item 616.0700.S.	63
51.	Flexible Tubular Markers.	64
52.	Install Conduit Into Existing Item, Item 652.0700.S.01	64
53.	Electrical Service Meter Breaker Pedestal (Location).	65
54.	Crack and Damage Survey, Item 999.1500.S.	65
55.	Abandon Sanitary Sewer–Slurry, Item SPV.0035.01.	66
56.	Root Pruning Trees, Item SPV.0060.01.	66
57.	Pruning Tree, Item SPV.0060.02	67
58.	Grubbing Special 72-Inch, Item SPV.0060.03.	67
59.	Remove, Salvage, and Reinstall Bicycle Rack, Item SPV.0060.04	68
60.	Precast Sign Post Base, Item SPV.0060.05	68
61.	Sign Post Base for Concrete Installation, Item SPV.0060.06.	69
62.	Manholes 8x8-FT Special, Item SPV.0060.07	70
63.	Sidewalk Trench Drain, Item SPV.0060.08.	71
64.	Concrete Pipe Support, Item SPV.0060.09.	71
65.	Reconstruct Bench and Flowlines, Storm Sewer, Item SPV.0060.10.	72
66.	Utility Line Opening (ULO), Item SPV.0060.11.	72
67.	Locate and Reference Property Corners, Item SPV.0060.12	73
68.	Reset Property Corners, Item SPV.0060.13	73
69.	Street Light Removal, Item SPV.0060.14, Traffic Signal Removal, SPV.0060.15.	74
70.	Lighting Control Cabinet, Item SPV.0060.16.	75
71.	LED Luminaire and Mounting Bracket Type 1, Item SPV.0060.17; LED Luminaire and Mounting Bracket Type 2, Item SPV.0060.18; LED Luminaire and Mounting Bracket Type 3, Item SPV.0060.19; LED Luminaire and Mounting Bracket Type 4, Item SPV.0060.20; LED Luminaire and Mounting Bracket Type 5, Item SPV.0060.21.	76
72.	Pole Aluminum 20-Foot Street Light, Black, Item SPV.0060.22	77
73.	Pole 30-Foot, 11 Gauge, Item SPV.0060.23; Pole 30-Foot, 7 Gauge, Item SPV.0060.24; Pole 20-Foot, 7 Gauge, Item SPV.0060.25.	78
74.	Electrical Pullbox, Type I, Item SPV.0060.26; Electrical Pullbox, Type III, Item SPV.0060.27; Electrical Pullbox, Type V, Item SPV.0060.28; Electrical Pullbox, Type VII, Item SPV.0060.29	80

75.	Concrete Base Type G, Item SPV.0060.30; Concrete Base Type LB-2, Item SPV.0060.31; Concrete Base Type LB-3, Item SPV.0060.32; Concrete Base Type LB-8, Item SPV.0060.33; Concrete Base Type P, Item SPV.0060.34; Concrete Base Type M, Item SPV.0060.35	80
76.	Concrete Base Offset, Item SPV.0060.36.	82
77.	Transformer Base 16-Inch Steel, Item SPV.0060.37.	82
78.	Inlet Covers Flat Temporary, Item SPV.0060.38	83
79.	NEMA TS2 Type 1 Traffic Signal Control Cabinet, Item SPV.0060.40.	84
80.	Traffic Signal Ethernet Switch, Item SPV.0060.41.	94
81.	Pedestal Base, Black, Item SPV.0060.42;	94
82.	Traffic Signal Trombone Arms Aluminum 12-Foot, Item SPV.0060.43; Traffic Signal Trombone Arms Aluminum 18-Foot, Item SPV.0060.44; Traffic Signal Trombone Arms Aluminum 22-Foot, Item SPV.0060.45.	95
83.	Traffic Signal Heads 12-Inch, 3-Section, Item SPV.0060.46; Traffic Signal Heads 12-Inch, 4-Section, Item SPV.0060.47; Traffic Signal Heads 12-Inch, 5-Section, Item SPV.0060.48; Traffic Signal Heads 16-Inch Pedestrian with Countdown, Item SPV.0060.49.	96
84.	Backplates Signal Face, 3-Section 12-Inch, Item SPV.0060.50; Backplates Signal Face, 4-Section 12-Inch, Item SPV.0060.51; Backplates Signal Face, 5-Section 12-Inch, Item SPV.0060.52.	97
85.	Remove Base Type 10, Item SPV.0060.56.	98
86.	Remove Sanitary Sewer Access Structure, Item SPV.0060.57.	
87.	Abandon Sanitary Sewer Access Structure, Item SPV.0060.58.	99
88.	Sanitary Sewer Access Structure, 4-Foot Diameter, Item SPV.0060.59; Sanitary Sewer Access Structure, 5-Foot Diameter, Item SPV.0060.60.	99
89.	Sanitary Sewer Tap, Item SPV.0060.61	100
90.	Sewer Electronic Markers, Item SPV.0060.62.	101
91.	Sanitary Sewer Internal Chimney Seal, Item SPV.0060.63	101
92.	External Sewer Access Structure Joint Seal, Item SPV.0060.64.	102
93.	Sanitary Lateral Reconnect, Item SPV.0060.65.	102
94.	Adjusting Sanitary Sewer Manhole, Monona, Item SPV.0060.66.	103
95.	Abandon Sanitary Sewer – Pipe Plug, Item SPV.0060.67.	104
96.	Reconstruct Bench and Flowlines, Sanitary Sewer, Item SPV.0060.68	105
97.	Install Compression Coupling, Item SPV.0060.69	105
98.	Cut Off Existing Water Main, Item SPV.0060.70.	106
99.	Cut-In or Connect-To Existing Water System, Item SPV.0060.71.	107
100.	Abandon Water Valve Box, Item SPV.0060.72.	108
101.	Abandon Water Valve Access Structure, Item SPV.0060.73.	108
102.	Remove and Salvage Existing Hydrant, Item SPV.0060.74	109
103.	Adjust Water Valve Box Section, Item SPV.0060.75	109
104.	Furnish & Install 6-Inch Valve, Item SPV.0060.76; Furnish & Install 8-Inch Valve, Item SPV.0060.77; Furnish & Install 10-Inch Valve, Item SPV.0060.78.	110
105.	Furnish and Install Hydrant, Item SPV.0060.79.	111
106.	Relocate Water Service, Item SPV.0060.80.	111
107.	Remove and Salvage Drinking Fountain, Item SPV.0060.81	112
108.	Drinking Fountain, Item SPV.0060.82.	112

110. Adjust Curb Box, Item SPV.0060.84	15 15 16 16 17 19 20 20
Inlet Covers Madison Special, Item SPV.0060.86	15 16 16 17 19 20 20
113. Temporary Lighting, Item SPV.0060.87	16 17 19 20 20
114. Optical Signal Preempt, Item SPV.0060.88	16 17 19 20 20
115. Temporary Traffic Signals Atwood Avenue - Walter Street, Item SPV.0060.89; Temporary Traffic Signals Atwood Avenue - Cottage Grove Road, Item SPV.0060.90	17 19 20 20
Signals Atwood Avenue – Cottage Grove Road, Item SPV.0060.90	19 20 20
117. Remove, Salvage, and Reinstall Riprap Heavy, Item SPV.0060.92	20 20
118. Construction Staking Sanitary Sewer, Item SPV.0060.93	20
119. Construction Staking Water Main, Item SPV.0060.94	
120. Temporary Overhead Fiber Optic, SPV.0060.95	24
121. Shortgrass Prairie Seed Mix, Item SPV.0085.01	ΖΊ
 Railing Pedestrian Steel B-13-864, Item SPV.0090.01. Concrete Curb & Gutter 24-Inch Type D Special, Item SPV.0090.02; Concrete Curb & Gutter 30-Inch Type D Special, Item SPV.0090.03; Concrete Curb & Gutter 24-Inch Type D Special HF, Item SPV.0090.04; Concrete Curb & Gutter 30-Inch Type D Special HF, Item SPV.0090.05; Concrete Curb & Gutter 24-Inch Type X Special, Item SPV.0090.06; Concrete Curb & Gutter 24- 	21
123. Concrete Curb & Gutter 24-Inch Type D Special, Item SPV.0090.02; Concrete Curb & Gutter 30-Inch Type D Special, Item SPV.0090.03; Concrete Curb & Gutter 24-Inch Type D Special HF, Item SPV.0090.04; Concrete Curb & Gutter 30-Inch Type D Special HF, Item SPV.0090.05; Concrete Curb & Gutter 24-Inch Type X Special, Item SPV.0090.06; Concrete Curb & Gutter 24-	22
Inch Type D Special, Item SPV.0090.03; Concrete Curb & Gutter 24-Inch Type D Special HF, Item SPV.0090.04; Concrete Curb & Gutter 30-Inch Type D Special HF, Item SPV.0090.05; Concrete Curb & Gutter 24-Inch Type X Special, Item SPV.0090.06; Concrete Curb & Gutter 24-	23
Inch Type A Special, Item SPV.0090.07; Concrete Curb & Gutter 30-Inch Type A Special, Item SPV.0090.081	24
124. Concrete Curb & Gutter Type Special Parking Lot, Item SPV.0090.091	
125. Concrete Gutter 24-Inch Type D Special, Item SPV.0090.10	
126. Reflective Sign Post, Item SPV.0090.12	
127. Marking Line Epoxy 6-Inch, Item SPV.0090.13; Marking Crosswalk Epoxy Ladder Pattern 18-Inch, Item SPV.0090.14; Marking Stop Line Epoxy 24-Inch, Item SPV.0090.15	
128. Electrical Wire Lighting, 14-3 Grounded, Item SPV.0090.16	
129. Loop Detector Lead-In Cable Special, Item SPV.0090.17	
130. Fiber Optic Cable 24-Count, Item SPV.0090.18; Fiber Optic Cable 144-Count, Item SPV.0090.191	
131. Staking Temporary Pavement, Item SPV.0090.201	
132. Sanitary Sewer Pipe PVC, 8-Inch, Item SPV.0090.211	
133. Sanitary Sewer Lateral, Item SPV.0090.221	
134. Remove Sanitary Sewer Pipe, Item SPV.0090.231	
135. Select Fill for Sanitary Sewer, Item SPV.0090.24	
136. Utility Trench Patch Type III, Item SPV.0090.251	32
137. Sanitary Sewer Lining, Item SPV.0090.261	32
138. Furnish & Install 6-Inch Pipe & Fittings, Item SPV.0090.27; Furnish & Install 8-Inch Pipe and Fittings, Item SPV.0090.28; Furnish & Install 10-Inch Pipe and Fittings, Item SPV.0090.29; Furnish & Install 12-Inch Pipe and Fittings, Item SPV.0090.30	38
139. Sawed in Bicycle Loop Detection, Item SPV.0090.311	
140. Thermoplastic Retroreflective Pavement Marking, 4-Inch, Item SPV.0090.32; Thermoplastic Retroreflective Pavement Marking, 6-Inch, Item SPV.0090.33	
141. Wall Modular Block Gravity R-13-336, Item SPV.0165.01	
142. Cut-Stone Boulders, Item SPV.0165.02	41

143.	High Friction Colored Surface, Green, Item SPV.0165.03.	148
144.	Pavement Cleanup, Item SPV.0170.01	149
145.	Raised Concrete Crosswalk, Item SPV.0180.01.	150
146.	Shredded Hardwood Bark Mulch, Item SPV.0180.02.	151
147.	Planting Mix Topsoil, Item SPV.0180.03.	151
148.	Construct Inside Drop, 6-Inch, Item SPV.0200.01; Construct Inside Drop, 8-Inch, Item SPV.0200.02.	152

STSP'S Revised June 28, 2022 SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 5992-10-16, 5992-10-17, and 5992-10-18; City of Madison Madison, Atwood Avenue; Fair Oaks Ave to Cottage Grove Road, Local Street, Dane 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, 2023 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 (20220628)

2. Scope of Work.

The work under this contract shall consist of grading, base aggregate dense, storm sewer, sanitary sewer, water main, HMA pavement, concrete curb and gutter, concrete sidewalk, permanent signing, pavement marking, street lighting, traffic signals, structure work on B-13-0254, B-13-0864, R-13-0336, 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 ten calendar days after the engineer issues a written notice to do so.

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

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.

Maintain access for mail delivery and garbage/recycling pickup for all properties in the project area.

Notify Madison Metro transit system two weeks prior to construction. Notify one week prior to traffic switches and street closures. Contact Tim Sobota at (608) 261-4289.

Contact and coordinate with City of Madison for signal timing and phasing setup for temporary signals prior to the start of a traffic change or stage. City of Madison contact is Jerry Schippa, (608) 267-2969.

Notify the City of Madison Engineering Department, Traffic Engineering, City of Madison Police and Fire Departments at least three weeks prior to construction. Notify three days in advance of all traffic switches and closures of existing streets.

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.

Notify the Dane County Regional Airport if any type of crane or lift is to be used. When notifying the airport provide the height of the crane or lift to be used and for what time period it will be used. If the schedule for using the crane or lift changes, immediately contact the airport to make them aware of the change. Provide a minimum of five working days' notice to:

Airport Operations (608) 235-1001

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.

Within Olbrich Park and Olbrich Gardens, do not store equipment, vehicles, materials or disturb existing ground beyond the slope intercepts without specific approval of the City of Madison Parks department.

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.

Comply with all local ordinances that apply to local street work operations, including those pertaining to working during night time hours. Furnish any ordinance variance issued by the municipality or required permits to the engineer in writing three business days prior to performing such work.

Maintain pedestrian facilities according to American with Disabilities Act Accessibility Guidelines (ADAAG) requirements at all times. Construct temporary pedestrian access accommodations (crosswalks, curb ramps, and pedestrian surfaces) as shown in the plans, or where necessary, as directed by the engineer. Payment for the construction of temporary pedestrian access accommodations will be made by the department under the bid items Temporary Pedestrian Surface Asphalt, Temporary Curb Ramp, Temporary Pedestrian Safety Fence, Type III Barricades, Traffic Control Drums, unless otherwise shown on the plans.

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 paying and grading equipment.

Keep Atwood Avenue and Walter Street open to traffic at all times, except as permitted by these special provisions. Provide ingress and egress locations to the engineer ten working days in advance of anticipated use. Do not use the ingress or egress locations until approved by the engineer. Sign and/or use flag persons at the ingress and egress locations as directed by the engineer and according to standard spec 104.6.1 (4).

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.

Northern Long-eared Bat (Myotis septentrionalis)

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

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

Direct temporary lighting, if used, away from wooded areas during the bat active season: April 1 to October 31, both dates inclusive. To avoid adverse impacts upon the NLEBs, no tree clearing is allowed between April 1 and October 31, both dates inclusive.

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

Tree clearing is limited to that which is specified in the plans. If additional trees with a 3-inch or greater diameter at breast height (dbh) need to be removed, no tree clearing shall occur without prior approval from the engineer, following coordination with the WisDOT REC. Additional tree removal beyond the area originally specified will require consultation with the USFWS and may require a bat presence/absence or visual emergency survey. Notify the engineer if additional clearing cannot be avoided to begin coordination with the WisDOT REC. The WisDOT REC will initiate consultation with the USFWS and determine if a survey is necessary. 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.

Fish Spawning

There shall be no instream disturbance of Starkweather Creek at Station 111+00-113+00 as a result of construction activity under or for this contract, from March 1 to June 15 both dates inclusive, in order to avoid adverse impacts upon the spawning of warm water fishery species.

Any change to this limitation will require submitting a written request by the contractor to the engineer, subsequent review and concurrence by the Department of Natural Resources in the request, and final approval by the engineer. The approval will include all conditions to the request as mutually agreed upon by WisDOT and DNR.

4. Traffic.

General

The work under this item shall conform to the requirements of standard spec 643, the Manual on Uniform Traffic Control Devices (MUTCD), and as hereinafter provided.

The traffic requirements are subject to change at the direction of the engineer in the event of an emergency, local event, or significant traffic delays.

Submit to engineer for approval a detailed traffic control plan for any changes to the proposed traffic control as shown on the plans. Submit the plan 14 days before the preconstruction conference, or if after the preconstruction conference, 14 days before the intended use of the revised traffic control. A request does not constitute approval.

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

Provide 24 hours-a-day availability of equipment and forces to expeditiously restore devices such as, but not limited to, pavement marking, lights, signs, drums, barricades, arrow boards or other traffic control devices that are damaged or disturbed. The department will pay for materials that the engineer deems necessary to maintain these items at contract unit prices, or as extra work, if the disturbance or damage is not the result of the contractor's operations, negligence or noncompliance with the requirements of the contract.

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

- Do not park or store any vehicle, piece of equipment, or construction materials within the roadway lateral clearance or on adjacent streets beyond the project limits without approval of the engineer.
- No operations shall take place until all traffic control devices for such work are in the proper location.
- All construction vehicles and equipment entering or leaving live traffic lanes shall yield to through traffic, bicyclists, and pedestrians.
- Equip all vehicles and equipment entering or leaving the live traffic lanes with a hazard identification beam (flashing yellow signal) capable of being visible on a sunny day when viewed without the sun directly on or behind the device from a distance of 1,000 feet. Activate the beam when merging into or exiting a live traffic lane.
- Do not deliver and store materials and equipment within open travel lanes or open side roads during any stage of construction. Temporary lane closures and/or halting of traffic within open roadways is not permitted unless mentioned specifically below. Flagging operations will be incidental to the work item being performed for the contract according to standard spec 104.6.1(4).

Maintain areas for turning vehicles at all times except for specific construction operations in those areas. Undistributed quantities of Base Aggregate Dense 1 1/4-Inch are included in this contract to accommodate the turning movements.

Maintain a minimum of 1 foot of lateral clearance from the edge of live travel lanes to all traffic control devices.

Do not use flag persons to direct, control, or stop traffic, unless provided written approval from the engineer.

Mount all traffic control signs at a minimum height of 5 feet, measured from the bottom of the sign, above the edge of pavement.

Upon switching traffic to temporary pavement, designate a representative to monitor the condition of the temporary pavement for a period of not less than 8 hours after the switch and prior to beginning any work that may take place upon the existing roadway after completion of the traffic switch. Should the temporary pavement show signs of failure, immediately notify the engineer.

The project includes street lighting and traffic signals. Maintain existing traffic signals and functionality of the lighting system during the project with existing lighting or temporary lighting. Maintain existing traffic signals at each intersection until temporary traffic signals are in place and operating at that intersection. The City of Madison Traffic Engineering department will set timing of signals after the contractor has installed the temporary and permanent signals.

General Traffic Operations During All Stages

Maintain existing traffic operations to the extent possible during Stages 1 and 2 with the exceptions as shown on the plans.

Maintain a minimum of one lane of traffic in each direction at all times on Atwood Avenue between Walter Street and Cottage Grove Road except for closures and detours defined in this article.

Maintain a minimum of one single lane of eastbound traffic at all times on Atwood Avenue between Fair Oaks Avenue and Walter Street during Stages 3 and 4.

Maintain a minimum lane width of 10 feet at all times during construction and provide wider lane widths when shown in the plans.

Clear Zone Working Restrictions

Provide a minimum of 5 feet of lateral clearance from the edge of travel lane to temporary drop offs. Do not leave any slopes steeper than 3:1 within the 5-foot lateral clearance or any drop offs at the edge of the traveled way greater than 2 inches. In areas where 5 feet of lateral clearance cannot be provided to drops-offs and a 3:1 or flatter slope cannot be provided, protect the drop-offs with concrete barrier temporary. Limit the length of open utility trenches adjacent to the lateral clearance to 100 feet. Backfill or plate utility trenches adjacent to the lateral clearance zone during non-working hours.

If unsure whether an individual work operation will meet the safety requirements for working within the lateral clearance, review the proposed work operation with the engineer before proceeding with the work.

Property Access

Maintain access to all commercial and private entrances at all times for local residents, businesses, emergency vehicles, garbage pickup, and postal services on existing pavement, temporary pavement, or base aggregate dense according to the plans or as directed by the engineer. Maintain a minimum travel width of 20 feet for temporary access to business and park entrances and a minimum travel width of 10 feet for temporary access to residential entrances. Additional intermediate construction staging or staging gaps, not shown on the plans, may be necessary to maintain continuous access to all properties. A minimum of one driveway access shall be maintained at all times for businesses having multiple access points. Contact the property owner 48 hours prior to removing any existing entrance in order to coordinate temporary closures. Restore private entrances, including a gravel surface, within 12 hours of removal.

Special Access Requirements:

3815, 3819, 3825, and 3827 Atwood Avenue – Monona Lakeview Apartments – Driveways to be construction in halves to maintain access to all driveways at all times.

3113 Atwood Avenue – Coordinate with property owner to maintain accessibility to this property at all times due to mobility limitations.

Bicycle Access

The contractor shall detour bicycle access outside of the project corridor to the parallel Capital City Trail as shown on the plans.

Pedestrian Access

Maintain pedestrian access, including access to all businesses and residences at all times, according to current Americans with Disabilities Act (ADA) Accessibility Guidelines (ADAAG), within the project limits by means of existing sidewalk, Temporary Pedestrian Surface Asphalt bid item, Temporary Curb Ramp bid item, or new sidewalk at a minimum width of 5 feet. 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 Safety Fence 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."

Maintain pedestrian movements crossing the construction zone at the intersections of Welch Avenue, Oakridge Avenue/Sugar Avenue, Walter Street, Margaret Street, and Cottage Grove Road at all times and as shown in the plans, unless otherwise directed by the engineer.

Olbrich Park Boat Launch

A minimum travel width of 15 feet must be maintained at all times.

Olbrich Park Softball Fields

Maintain a minimum travel width of 20 feet during the hours of 5pm – 12am weekdays and on weekends between Fridays at 4pm to Monday at 12am. At all other times a minimum travel width of 10 feet must be maintained. Any changes to access must be approved by the engineer and City of Madison.

Olbrich Park Beach and Bier Garden

Maintain a minimum travel width of 20 feet must be maintained during the hours of 4:00 PM - 12:00 AM weekdays and on weekends between Fridays at 3:00 PM to Monday at 12:00 AM. At all other times a

minimum travel width of 10 feet must be maintained. Any changes to access must be approved by the engineer and City of Madison.

If the contractor coordinates the closure of any access to a business or private property with the owner(s), provide written documentation of coordination with the owner(s) to the engineer, prior to the start of work regarding the access closure.

Olbrich Garden Access

The Olbrich Gardens has special events daily April- October. The events listed below are important events in 2023.

The contractor shall meet with Olbrich gardens, WisDOT, construction inspector and City of Madison staff prior to construction to discuss the construction sequencing, staging, and access. The contractor shall contact Tanya Zastrow, Director of Olbrich Gardens TZastrow@cityofmadison.com for questions regarding Olbrich events and access during construction.

Special Events:

- April 7, 2023 The Canopy Sessions
- May 2023 AM and PM School Field Trips
- May 2023 October 2023 Weekend Weddings
- July 13, 2023 August 6, 2023 Blooming Butterflies Exhibit
- August 26, 2023 October 28, 2023 Gleam
- Stakeholder Events on Weekdays/Weekends all Season

Madison Metropolitan School District

Maintain pedestrian access, according to current ADA Accessibility Guidelines, within the project limits along Atwood Avenue immediately adjacent to Lowell Elementary School.

Do not store equipment and materials along Maple Avenue and Ludington Avenue to accommodate Lowell Elementary bus and parent drop-off and pickup. Routing for drop off and pick up is from Atwood Avenue to Ludington Avenue to Center Ave to Maple Ave. Buses exit to S. Fair Oaks Avenue.

The Lowell Elementary School schedule will end the 2022 – 2023 school year on June 8, 2023. The 2023-2024 school year will commence by September 1, 2023.

School bus arrivals occur from 7:00 AM to 7:30 AM weekdays during the school year. School bus departures occur from 12:45 PM to 1:15 PM Mondays, and 2:15 PM to 2:45 PM Tuesday – Friday.

Contact the Lowell Elementary school principal, Ellen Franzone, elfranzone@madison.k12.wi.us to coordinate construction impacts to school bus and parent drop-off and pickup. Lowell and Madison Metropolitan School District (MMSD) transportation will discuss revising drop-off and pickup procedures to accommodate spring 2023 construction.

Lowell Elementary School may be a site for summer school in 2023. MMSD will be considering relocating summer school to an alternate site to accommodate construction. If Lowell Elementary School is a site for summer school, additional coordination with the school principal will be needed.

Madison Metro Transit Access and Bus Stops

Maintain pedestrian access, according to current ADA Accessibility Guidelines, within the project limits to all Madison Metro Transit bus stop locations as shown in the plans. Place Temporary Bus Stop Pad according to the standard detail "Traffic Control, Pedestrian Accommodation" and as shown in the plans or as directed by the engineer. Closures of bus stops shall be according to the plans. Do not close a bus stop without approval of the engineer. Notify Madison Metro Transit a minimum of one week prior to closing a bus stop. Temporary bus stop pads will be paid under the bid items: Temporary Pedestrian Surface Asphalt, Temporary Curb Ramp, Temporary Pedestrian Safety Fence, and Temporary Pedestrian Barricades, as shown in the plans.

Traffic Control Signs PCMS

Install Traffic Control Signs PCMS at the project ends to notify motorists of upcoming construction activities two weeks before the start of construction activities and one week prior to beginning each construction stage or prior to any detour. These timeframes may be adjusted by the engineer.

Coordinate the locations of Traffic Control Signs PCMS with the engineer. Obtain acceptance from the engineer for all messages for all Traffic Control Signs PCMS.

Advance Notification

Notify City of Madison first responders (police, fire, EMS), Dane County Sheriff's Department, engineer, City of Madison traffic engineering, Madison Metro Transit, Madison Metropolitan School District, garbage/recycling pick-up companies, and the post office two weeks in advance of all traffic switches, lane closures, road closures, and detours. Notifications should be confirmed with all parties one week before implementation. Parties shall also be notified if a closure is cancelled.

Notify Eric Heggelund, Wisconsin Department of Natural Resources Transportation Liaison at (608) 275-3301 a minimum of two working days prior to beginning construction.

Traffic Control Operations

This information is included to assist the contractor and its subcontractors; do not interpret this information as a demonstration of specified means and methods. Coordinate the schedule of operations for the construction staging as shown in the plans and as noted in these special provisions. Do not move operations within the proposed construction staging unless modifications to the staging and schedule are approved in writing by the engineer. Address traffic, construction, transit, and pedestrians with any proposed staging modifications provided to the engineer.

Staging Segments

Segment 1 - Fair Oaks Avenue to Oakridge Avenue (Begin Project – Station 24+00)

Segment 2 - Oakridge to Walter Street (Station 24+00 - Station 42+00)

Segment 3 - Walter Street - Dennett Drive (Station 42+00 - Station 52+00)

Segment 4 - Dennett Drive to Cottage Grove Road (Station 52+00 – End Project)

Stage 1 Off-Street Construction (February 2023 – May 2023)

Stage 1 - All Segments

Traffic

<u>Atwood Avenue</u> – Maintain traffic on existing Atwood Avenue lanes with the exception of single lane closures at the intersection of Atwood Avenue and Dennett Drive for utility construction.

All Side Streets - Maintain full access to all side streets. No work or closures.

Construction

- Mobilization
- Clearing and Grubbing prior to March 31.
- Utility relocations (i.e., storm sewer outfall, pedestrian bridge and associated utility relocations) outside of the roadway including all utility work in the intersection at Dennett Drive.
- Begin pedestrian bridge: abutments, fill, riprap and cut stone boulders. Complete in stream work prior to in stream work restriction of March 1.
- Set and cover detour signing for Fair Oaks Avenue prior to Stage 2A.

- Set Walter Street Detour prior to Stage 2A.
- Set Walter Street Pedestrian Detour prior to Stage 2A.

Pedestrians

 Maintain pedestrian routing on existing sidewalks, both sides. If closures are needed for utility work, provide temporary crossings or sidewalk closures to alternate side.

Metro Transit

Maintain existing accommodations and transit stops elsewhere as shown on the plans.

Stage 2 Walter Street Closure (May 2023 - Late June 2023)

Stage 2A - Segment 1, 2, and 4

Traffic

Atwood Avenue - Maintain traffic on existing Atwood Avenue lanes (Consistent with Stage 1 plans)

Dennett Drive - Closed to Traffic

<u>All Side Streets and Access</u> - Maintain full access to all side streets except for Walter Street and Dennett Drive.

Construction

Atwood Avenue

 Any outside of roadway work including but not limited to the storm sewer outfall, pedestrian bridge, off street path along Lakeland.

Pedestrians

 Pedestrian routing will be maintained primarily on existing sidewalks, both sides except for Walter Street. At Walter Street, maintain pedestrian routing as shown on the plans. If closures are needed for utility work, provide temporary crossings or sidewalk closures to alternate side.

Metro Transit

• Maintain access to transit stops as shown on the plans.

Stage 2A – Segment 3

Traffic

<u>Atwood Avenue</u> – Shift traffic to eastbound travel lanes between Station 42+00 - 52+00 (Stage 2A Plans)

<u>All Side Streets and Access</u> - Maintain full access to all side streets except for Walter Street and Dennett Drive.

Initiate a maximum 42-calendar day full closure of Walter Street, implement Walter Street detour plan for Stage 2A and 2B.

Construction

Atwood Avenue

 Any outside of roadway work including but not limited to: the storm sewer outfall, pedestrian bridge, off street path along Lakeland.

Walter Street

Full build of Walter Street to the lower layer of HMA pavement including utilities, storm sewer
inlet, swale, and all elements necessary to open Walter Street to traffic. Construct proposed
utilities to the construction staging limit between Stage 2A and 2B within the Atwood
Avenue/Walter Street intersection.

Pedestrians

- Pedestrian routing will be maintained primarily on existing sidewalks, both sides except for Walter Street. At Walter Street, maintain pedestrian routing as shown on the plans. If closures are needed for utility work, provide temporary crossings or sidewalk closures to alternate side.
- For the duration of the Walter Street closure, pedestrians will be detoured to Dennett Drive, Sargent Street and back to Walter Street north of the construction limits.

Metro Transit

Maintain access to transit stops as shown on the plans.

Stage 2B - Segment 1

Traffic

Atwood Avenue - Maintain traffic on existing Atwood Avenue lanes

All Side Streets and Access - Maintain full access to all side streets.

Construction

Atwood Avenue

· None in this segment

Pedestrians

 Maintain pedestrian routing on existing sidewalks, both sides. If closures are needed for utility work, provide temporary crossings or sidewalk closures to alternate side.

Metro Transit

Maintain access to transit stops as shown on the plans.

Stage 2B - Segment 2, 3, and 4

Traffic

<u>Atwood Avenue</u> – Maintain traffic in the westbound Atwood Avenue travel lanes between Oakridge Avenue and Cottage Grove Road.

Restrict traffic using a flagging operation to complete the placement of the temporary asphalt pavement.

Flagging may occur on a weekend (Saturday and Sunday) and/or on a weekday during off-peak hours (9:00 AM to 3:00 PM). Flagging operations will not be allowed during special event or holiday weekends and must adhere to the requirements of the Public Convenience and Safety" article.

<u>All Side Streets and Access</u> - Maintain full access to all side streets except for Walter Street and Dennett Drive.

Construction

Atwood Avenue

- Construct proposed utilities from Oakridge Avenue to Cottage Grove Road along the south side
 of Atwood Avenue. Complete final curb and gutter, pavement, sidewalk/path construction
 between Margaret Street and Cottage Grove Road.
- Continue work on Stage 2A work on the south of Atwood Avenue between Oakridge Avenue and Cottage Grove Road including but not limited to the storm sewer outfall, pedestrian bridge, off street path along Lakeland.
- Place temporary asphalt pavement for Stage 3.
- Complete epoxy overlay on Structure B-13-0254 on southern one-third of the structure.

Walter Street

- Full build of Walter Street to the lower layer of HMA pavement, including utilities, storm sewer
 inlet, swale, and all elements necessary to open Walter Street to traffic. Construct proposed
 utilities to the construction staging limit between Stage 2A and 2B within the Atwood
 Avenue/Walter Street intersection if time remaining during closure.
- Open Walter Street to traffic upon complete at the end of the maximum 42-calendar day closure.

Pedestrians

- Maintain pedestrian routing as shown on the plans along the north/east side of Atwood Avenue between Oakridge Avenue and Cottage Grove. If closures are needed for utility work, provide temporary crossings or sidewalk closures to alternate side.
- For the duration of Walter Street closure, pedestrians will be detoured to Dennett Drive, Sargent Street and back to Walter Street as shown in the plans.

Metro Transit

Maintain access to transit stops as shown on the plans.

Interim Completion and Liquidated Damages – Full Reconstruction of Walter Street as described in Stage 2: 42 Calendar Days

• At the beginning of Stage 2, close Walter Street to through traffic for a maximum of 42 calendar days. Do not reopen until completing the following work: all underground utilities, storm sewer inlet, and drainage swale. Construct proposed utilities to the construction staging limit between Stage 2A and 2B within the Atwood Avenue/Walter Street intersection. Complete final curb and gutter, HMA pavement, signing, and marking necessary to reopen the roadway. Construction along Walter Street outside of the roadway limits may extend beyond the 42-calendar days.

If the contractor fails to complete the work necessary to reopen Walter Street to traffic within 42 calendar days, the department will assess the contractor \$1,585 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 42 calendar days. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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

Stage 3 - Fair Oaks Avenue to Oakridge Avenue Closure (Late June 2023 - October 2023)

Stage 3A - Segment 1

Traffic

<u>Atwood Avenue</u> – Close Atwood Avenue between Oakridge Avenue/Sugar Avenue and Lakeland Avenue maintaining full access to the eastern access driveway to Olbrich Botanical Gardens. Detour east and westbound Atwood Avenue vehicle traffic along Fair Oaks Avenue, Milwaukee Street, and Walter Street as shown in the plans. Atwood Avenue may be closed for a maximum of 27 total calendar days to complete the work in Stage 3A.

Maintain a single lane eastbound for bus only access to between Fair Oaks Avenue and Ludington Street.

<u>All Side Streets and Access</u> - Side Streets between Fair Oaks Avenue and Oakridge Avenue/Sugar Avenue will be closed for the duration of this stage.

Construction

Atwood Avenue

 Full build in this segment - All utilities, curb and gutter, pavement, sidewalk, retaining wall, grading and restoration.

Pedestrians

- Maintain pedestrian on existing northern sidewalk as shown in the plans. If closures are needed for utility work, provide temporary crossings or sidewalk closures to alternate side.
- Maintain access to transit stops as shown on the plans.

Metro Transit

Maintain access to transit stops as shown on the plans.

Stage 3A - Segment 2, 3, and 4

Traffic

<u>Atwood Avenue</u> – This segment will have access maintained to park lots and Olbrich Gardens, one lane in each direction. Maintain traffic on the westbound Atwood Avenue travel lanes to complete any construction activities from Stage 2B between Oakridge Avenue and Cottage Grove Road.

Upon completion of Stage 2B, switch traffic to the south side of Atwood Avenue between Station 27+00 to Cottage Grove Road on eastbound travel lanes as shown in staging plans for 3A.

Restrict traffic using a flagging operation to complete the placement of the lower layer of HMA pavement to the crown joint.

Flagging may occur on a weekend (Saturday and Sunday) and/or on a weekday during off-peak hours (9:00 AM to 3:00 PM). Flagging operations will not be allowed during special event or holiday weekends and must adhere to the requirements of the Public Convenience and Safety" article.

<u>All Side Streets and Access</u> - Side Streets between Walter Street and Cottage Grove Road on the east side of Atwood Avenue will be closed for the duration of this stage.

Construction

Atwood Avenue

- Construct the north side from 27+00 to Cottage Grove Road. Complete all utilities along the north side of Atwood Avenue. Complete curb and gutter, pavement, north median curb and gutter, sidewalk/path, on the north side of Atwood Avenue.
- Construction of storm sewer P7-21, P7.2A, P7-17, and P7-24 should not be constructed prior to Stage 3A to avoid conflicts with proposed gas facilities.
- Continue off roadway work including but not limited to the storm sewer outfall, off street path along Lakeland, and Lakeland Avenue.
- Construct lower layer of HMA pavement to the centerline of Atwood Avenue.
- Complete epoxy overlay on Structure B-13-0254 on northern one-third of the structure and pavement approach slabs.

Pedestrians

 Maintain pedestrian routing along the south side of Atwood Avenue between Oakridge Avenue and Cottage Grove Road on as shown on the plans. If closures are needed for utility work, provide temporary crossings or sidewalk closures to alternate side.

Metro Transit

• Maintain access to transit stops as shown on the plans.

Stage 3B - Segment 1

Traffic

<u>Atwood Avenue</u> – Close Atwood Avenue between Oakridge Avenue/Sugar Avenue and Lakeland Avenue maintaining full access to the eastern access driveway to Olbrich Botanical Gardens. Detour east and westbound Atwood Avenue along Fair Oaks Avenue, Milwaukee Street, and Walter Street as shown in the plans. Atwood Avenue may be closed for a maximum of 27 total calendar days to complete the work in Stage 3A.

Maintain a single lane eastbound for bus only access to Ludington Street.

<u>All Side Streets and Access</u> - Side Streets between Fair Oaks Avenue and Oakridge Avenue/Sugar Avenue will be closed for the duration of this stage.

Construction

Atwood Avenue

 Full build in this segment - All utilities, curb and gutter, pavement, sidewalk, retaining wall, grading and restoration.

Pedestrians

• Maintain pedestrian on existing northern sidewalk as shown in the plans. If closures are needed for utility work, provide temporary crossings or sidewalk closures to alternate side.

Metro Transit

Maintain access to transit stops as shown on the plans.

Stage 3B - Segment 2 and 3

Traffic

<u>Atwood Avenue</u> – Maintain traffic on westbound Atwood Avenue travel lanes between Oakridge Avenue and Dennett Drive.

Restrict traffic using a flagging operation to complete the placement of the lower layer of HMA pavement to the crown joint.

Flagging may occur on a weekend (Saturday and Sunday) and/or on a weekday during off-peak hours (9:00 AM to 3:00 PM). Flagging operations will not be allowed during special event or holiday weekends and must adhere to the requirements of the Public Convenience and Safety" article.

<u>All Side Streets and Access</u> - Side Streets between Walter Street and Cottage Grove Road on the east side of Atwood Avenue will be closed for the duration of this stage.

Construction

Atwood Avenue

- Construct the south side from 27+00 to Margaret Street. Complete all remaining curb and gutter, pavement, southern median curb and gutter, sidewalk/path, on the south side of Atwood Avenue.
- Complete epoxy overlay on Structure B-13-0254 on middle 1/3 of the structure and pavement approach slabs.
- Construct lower layer of HMA pavement to the centerline of Atwood Avenue.

Pedestrians

 Maintain pedestrian routing along the north side of Atwood Avenue on the new sidewalk as shown on the plans. If closures are needed for utility work, provide temporary crossings or sidewalk closures to alternate side.

Metro Transit

Maintain access to transit stops as shown on the plans.

Stage 3B - Segment 4

Traffic

<u>Atwood Avenue</u> – Cross traffic to the eastbound travel lanes east of Margaret Street to complete any remaining work from Stage 3A - Segment 4.

Restrict traffic using a flagging operation to complete the placement of the lower layer of HMA pavement to the crown joint.

Flagging may occur on a weekend (Saturday and Sunday) and/or on a weekday during off-peak hours (9:00 AM to 3:00 PM). Flagging operations will not be allowed during special event or holiday weekends and must adhere to the requirements of the Public Convenience and Safety" article

<u>Dennett Drive</u> – Restrict to right-in/right out to westbound Atwood Avenue until Walter Street is open to bi-directional traffic. Once Walter Street is open to bi-directional traffic, close Dennett Drive to traffic at Atwood Avenue. Maintain northbound and southbound access to either Walter Street or Dennett Drive at all times.

<u>Margaret Street/Olbrich Avenue</u> - Restrict to right-in/right out to westbound Atwood Avenue. Maintain access to either Margaret Street or Olbrich Avenue at all times. Close either Margaret Street or Olbrich Avenue at Atwood Avenue.

Construction

Atwood Avenue

- Complete any remaining Stage 3A-Segment 4 work in this segment to complete curb and gutter, pavement, medians, sidewalk/path, etc. on the north side.
- Construct lower layer of HMA pavement to the centerline of Atwood Avenue.

Pedestrians

 Maintain pedestrian routing along the south/west side of Atwood Avenue between Dennett Drive and Cottage Grove Road as shown on the plans. If closures are needed for utility work, provide temporary crossings or sidewalk closures to alternate side.

Metro Transit

Maintain access to transit stops as shown on the plans.

Stage 3C - Segment 2 Only

Traffic

<u>Atwood Avenue</u> – Split traffic onto northern westbound Atwood Avenue travel lane and eastbound Atwood Avenue travel lane between Station 27+00 – Station 37+00.

Construction

Atwood Avenue

 Complete epoxy overlay on Structure B-13-0254 on middle one-third of the structure and pavement approach slabs.

Pedestrians

 Maintain pedestrian routing as shown on the plans. If closures are needed for utility work, provide temporary crossings or sidewalk closures to alternate side.

Metro Transit

Maintain access to transit stops as shown on the plans.

Interim Completion and Liquidated Damages – Full Reconstruction of Atwood Avenue – Segment 1: 27 Calendar Days

At the beginning of Stage 3, close Atwood Avenue between Fair Oaks Avenue and Oakridge Avenue/Sugar Avenue to through traffic for a maximum of 27 calendar days. Do not reopen until completing the following work: all underground utilities, final base aggregate, HMA pavement, curb and gutter, sidewalk, driveways, signing, and marking necessary to reopen the roadway. Construction along Atwood Avenue outside of the roadway limits may extend beyond the 27 calendar days, so long is Atwood Avenue is fully open to traffic in both directions.

If the contractor fails to complete the work necessary to reopen Atwood Avenue to traffic within 27 calendar days, the department will assess the contractor \$1,585 in interim liquidated damages for each calendar day the contract work remains incomplete beyond 27 calendar days. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

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

Stage 4 - Final Completion All Stages (All Segments)

Traffic

<u>Atwood Avenue</u> – Maintain a single lane of traffic in each direction throughout the corridor as necessary to complete remaining construction activities.

<u>All Side Streets and Access</u> - Side Streets between Fair Oaks Avenue and Oakridge Avenue/Sugar Avenue, not included Oakridge Avenue and Sugar Avenue will be closed for the duration of this stage. All other access will be maintained.

Construction

Atwood Avenue

- Any remaining efforts on or along Lakeland Avenue (Could be completed by the end of Stage 3).
- Pedestrian Bridge/Multi-use Path (Could be completed by the end of Stage 3).
- Mill and Overlay Station 68+10 Station 70+27.
- Final surface paving for all areas outside of the main roadway, markings, signage, landscaping, etc.

Pedestrians

 Maintain pedestrian routing on new sidewalk or path. If closures are needed for completing outstanding work, provide temporary crossings or sidewalk closures to alternate side.

Metro Transit

Maintain access to transit stops as shown on the plans.

Stage 5 (Placement of Upper Layer of HMA Pavement and Pavement Markings)

Traffic

Restrict traffic using a flagging operation to complete the placement of the upper layer of HMA pavement and final pavement marking. Restrict access accordingly at side roads as shown in the plans.

Flagging may occur on a weekend (Saturday and Sunday) and/or on a weekday during off-peak hours (9:00 AM to 3:00 PM). Flagging operations will not be allowed during special event or holiday weekends and must adhere to the requirements of the Public Convenience and Safety" article.

Construction

Construct the upper layer of HMA pavement and final pavement markings.

Pedestrians

All sidewalk, path, crosswalks, and Madison Metro Transit stops shall be open except during paving and pavement marking operations. Minimize the duration of the crosswalk closures.

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 Atwood Avenue 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:

- All day Saturday, May 13, 2023 for University of Wisconsin-Madison Graduation;
- From noon Friday, May 26, 2023 to 6:00 AM Tuesday, May 30, 2023 for Memorial Day;
- All day, Wednesday, June 21, 2023 for Summer Solstice;
- From noon Friday, June 30, 2023 to 6:00 AM Wednesday, July 5, 2023 for Independence Day;
- All day Tuesday, August 15, 2023 and Wednesday, August 16, 2023 for downtown apartment move-in;
- Starting at 3:00 PM, Wednesdays, June 28, 2023 August 2, 2023 for Concerts on the Square;
- From noon Friday, September 1, 2023 to 6:00 AM Tuesday, September 5, 2020 for Labor Day;
- All day, Saturday, September 2, 2023, and Saturday, September 16, 2023, and other dates TBD for Wisconsin Badger home football games;
- All day, TBD for Freakfest;
- From 3:00 PM to 12:00 AM, Tuesday, October 31, 2023 for Halloween.

stp-107-005 (20210113)

6. Utilities.

This contract does not come under the provision of Administrative Rule Trans 220. stp-107-066 (20080501)

Project 5992-10-16

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

Utility companies will be discontinuing some facilities in place after relocating facilities to avoid conflicts with the proposed work. Removal by the contractor of any discontinued facilities necessary to complete the proposed work, including plugging the remaining ends of the facility, is considered incidental to the contract.

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.

AT&T

Existing Facilities

AT&T has existing buried telecommunication facilities in parallel duct packages between Fair Oaks and Oakridge Avenue. One duct package is located beneath the eastbound travel lane in this segment, the other is located beneath the southern sidewalk and terrace.

From Oakridge Avenue to Lakeland Avenue, the duct packages continue parallel, both under the southerly eastbound travel lane. At Lakeland Avenue, the duct package extends into the park, south of the existing sidewalk, running parallel to the existing sidewalk to Starkweather Creek.

The facility crosses the Starkweather Creek to a manhole located at Station 32+75, RT. Two duct packages continue east under the eastbound travel lane and southern/western terrace, respectively to a manhole located at Margaret Street at approximately Station 55+20, RT.

A duct package extends to the east across Atwood Avenue at Margaret Street and continues south in the eastbound travel lanes to the end of the project limits at Cottage Grove Road.

Conflicts with underground facilities are anticipated. Work between Oakridge Avenue and Cottage Grove Road is anticipated to be completed prior to construction. Work between Fair Oaks Avenue and Oakridge Avenue is anticipated to take place during construction.

Facility Improvements

AT&T will discontinue the duct package located in the eastbound travel lane of Atwood Avenue between Station 12+50, RT to a manhole at Station 24+80, RT. The duct package located beneath the southern terrace and sidewalk in this same location will remain in place. Segments of the duct package beneath the terrace will be adjusted to avoid conflicts as follows:

- Lower duct package 24" from Station 12+75, RT Station 14+10, RT
- Lower duct package 12" and shift 2' south from Station 18+85, RT 19+10, RT
- Station 20+75, RT Station 21+25, RT

AT&T will discontinue the facilities located along Atwood Avenue between Station 24+80, RT and Station 50+50, RT. AT&T will install a new (4) 4" duct package located in a new easement along the proposed multi-use path or south of the path within Olbrich Park between the manhole at 24+80, RT and a new handhole and pedestal located at Station 47+25, 66' RT. The new duct package will continue along the southwest edge of the muti-use path to Station 50+50, RT where it will bend to the west to connect into the existing manhole.

Existing facilities that cross Atwood Avenue at approximately 51+00, LT&RT near Dennett Drive will be lowered approximately 12" to avoid conflicts.

AT&T will discontinue the western facility that runs in the eastbound travel lane from Station 50+50, RT to Station 55+20, RT. The eastern facility that is located under the southern/eastern terrace will remain in place between Station 50+50, RT and 55+20, RT.

South of the manhole at 55+20, RT, existing facilities that cross to the east side of Atwood Avenue and continue to the south project limits as Cottage Grove Road will be discontinued to a manhole at Station 71+10, LT.

A new (4) 4" duct package will be installed between Station 55+20, RT and Station 69+75, RT. The new facility will angle to the southwest to connect into the existing manhole at Station 71+10, LT at Cottage Grove Road.

Existing facilities extending up side streets including Garrison Street, Dennett Drive, Margaret Street, and Olbrich Avenue will remain in place.

Charter Communications

Existing Facilities

Charter Communications has existing overhead facilities located on Madison Gas and Electric (MGE) poles between Fair Oakes Avenue and Oakridge Avenue on the south side of the road. Beginning in the City of Monona limits south of Margaret Street (approximately Station 58+25, RT), Charter has buried facilities that run behind the existing sidewalk

Conflict with Charter's facilities are in conjunction with MGE Electric. Facilities will be relocated in conjunction with MGE Electric.

Facility Improvements During Construction

Charter to work in conjunction with MG&E as we are attached on their poles along Atwood Ave from Fair Oaks to Oakridge Avenue. MG&E has proposed removing their poles and going underground. Charter will install underground with 2" conduit from Station 12+75 to approximately Station 23+55, +/-28' RT.

City of Madison Parks - Sanitary Sewer

Existing Facilities

City of Madison Parks has sanitary sewer services (maintained by City of Madison – Sanitary Sewer) located within Olbrich Park.

Sanitary Sewer Services

Existing sanitary sewer services extend into the park in the following locations:

- North into the Olbrich Gardens parking lot to connect to the building facility.
- Lakeland Avenue to the existing park shelter along the lake.
- South into the parking lot at Walter Street to the existing shelter
- On Walter Street approximately 200 feet north of Johns Street, towards the west to the park shelter.

Facility Improvements

No conflicts with City of Madison Parks sanitary sewer services are anticipated. No improvements are included.

City of Madison Parks - Water Utility

Existing Facilities

City of Madison Parks has water services (Maintained by City of Madison Water Utility) located within Olbrich Park.

Watermain Services

Existing water services extend into the park in the following locations:

- Existing drinking fountain at Lakeland Avenue
- Existing drinking fountain at Walter Street.
- North into the parking lot adjacent to the baseball fields to the park shelter and drinking fountain.
- South into the parking lot at Walter Street to the existing shelter
- On Walter Street approximately 200 feet north of Johns Street, towards the west to the park shelter.

Facility Improvements

No conflicts with City of Madison Parks water utility services are anticipated. No improvements are included.

City of Madison Parks - Electric

Existing Facilities

City of Madison Parks has buried electrical facilities (maintained by City of Madison Traffic Engineering) located within Olbrich Park.

Buried Electric

Existing buried electrical facilities exist within Olbrich Park at the following locations:

- Existing buried electric along the eastern abutment of the roadway bridge on Atwood Avenue at
 the Starkweather Creek crossing. The facilities extend south and have an east/west crossing of
 the creek approximately 30' south of the existing bridge. The buried electric extends south along
 both east and west sides of the creek providing lighting to the pier into Lake Monona on the
 western side and the boat launch parking long on the east.
- Buried electric runs along the perimeter of the baseball diamond fencing for ball field lighting.

Conflicts are anticipated with the buried electrical facilities at the Starkweather Creek crossing with the proposed pedestrian bridge.

Facility Improvements

Buried electric will be relocated between Station 11+37, 13' RT and Station 112+32, 13' RT below the wing walls for the proposed pedestrian bridge.

Construct, reconstruct, relocate, remove, as shown in the plans and in the bid items for this project.

City of Madison -Sanitary Sewer (Project ID 5992-10-18)

Existing Facilities

Existing sanitary sewer and laterals between Fair Oaks Avenue and Oakridge Avenue, extending just beyond Oakridge to the west. There is no sanitary sewer between Oakridge Avenue and Walter Street. Existing sanitary sewer begins north/west of Dennett Drive and extends south to a manhole south of Olbrich Avenue. This sewer runs on the east side of Atwood Avenue. Sanitary sewer also runs north on Walter Street.

An existing discontinued sanitary sewer is shown running parallel to the existing southern sidewalk within Olbrich Park.

Facility Improvements During Construction

As part of the project, construct, relocate, discontinue, and remove sanitary sewer facilities as shown in the plans and in the bid items for this project. Replace and reconnect existing services as shown in the plans and in the bid items for this project.

Conflict will exist between the discontinued sanitary sewer and the proposed pedestrian bridge and various storm sewer crossings. The discontinued sanitary sewer will be removed as per the Bid Item "Removing"

Sanitary Sewer Pipe" and as shown on the plans during construction.

City of Madison Traffic Engineering - Communications

Existing Facilities

Existing buried fiber optic runs along the southern terrace between Fair Oaks Avenue and Walter Street where it crosses on the west leg to the north terrace to Cottage Grove Road.

Facility Improvements During Construction

As part of the project ID 5992-10-16, remove and construct new fiber optic facilities within the project limits according to the plans and specifications.

City of Madison Traffic Engineering – Electric

Existing Facilities

Buried electric for street lighting and traffic loop detectors run along the northern terrace between Fair Oaks Avenue and Walter Street. Additional buried electrical facilities that begin at Dennett Drive and run along the southern side of Atwood Avenue beneath the existing sidewalk to Cottage Grove Road for traffic signals and loop detectors at the intersection

Facility Improvements During Construction

As part of the project ID 5992-10-16, remove and construct new buried electric facilities within the project limits according to the plans and specifications.

City of Madison Traffic Engineering - Street Lighting

Existing Facilities

Buried electric for street lighting and traffic loop detectors run along the northern terrace between Fair Oaks Avenue and Walter Street. Additional buried electrical facilities that begin at Dennett Drive and run along the southern side of Atwood Avenue beneath the existing sidewalk to Cottage Grove Road for traffic signals and loop detectors at the intersection.

Facility Improvements During Construction

As part of the project 5992-10-16, remove and construct new buried electric facilities for street lighting within the project limits according to the plans and specifications.

Three new path lights along the path at Station 97+79, RT, 101+15, RT, and 105+25, RT are included in project 5992-10-17.

City of Madison – Water Utility (Project ID 5992-10-18)

Existing Facilities

Water main and associated services run the full length of the project between Fair Oaks Avenue and Cottage Grove Road and on Walter Street.

Conflicts are anticipated with water main facilities and sanitary and storm improvements for this project.

Facility Improvements During Construction

As part of the project, construct, relocate, discontinue, and remove spot water main replacements within the project limits as shown in the plans and in the bid items for this project in order to avoid conflict with sanitary sewer and storm sewer improvements.

City of Monona - Sanitary Sewer (Project 5992-10-18)

Existing Facilities

The City of Monona has sanitary sewer within the project limits that extends from Cottage Grove Road to Olbrich Avenue.

Conflicts with sanitary sewer facilities are not anticipated and are to remain operational during construction.

Facility Improvements During Construction

The City of Monona has no plans to replace any facilities within the project limits. As part of the project, line the existing sanitary sewer and repair manholes as shown in the plans and in the bid items for this project.

City of Monona – Watermain (Project 5992-10-18)

Existing Facilities

The City of Monona has water main within the intersection of Atwood Avenue and Cottage Grove Road.

Conflicts with watermain facilities are not anticipated and are to remain operational during construction.

Facility Improvements

The City of Monona has no plans to replace any facilities within the project limits.

Madison Gas and Electric - Electric

Existing Facilities

Overhead electric runs along the southern terrace between Fair Oaks Avenue and Oakridge Avenue. Additional overhead facilities begin east/south of Walter Street on the south side of Atwood Avenue and continue along the southern terrace approximately 200 feet east/south of Olbrich Avenue.

Conflict with MGE's facilities is anticipated throughout the corridor.

MGE will complete their work during construction. MGE estimates that the work between Fair Oaks Avenue and Oakridge Avenue will take three weeks to complete. Provide MGE one month notice for scheduling. MGE will need one week to install MGE facilities between Center Avenue and Oakridge Avenue once the retaining wall area is grading or constructed where access to the area is provided. The MGE crossing of Atwood Avenue at Sugar Avenue is estimated to take two days.

MGE construction between Oakridge Avenue and Cottage Grove Road is estimated to take three weeks to complete. Provide MGE one month notice for scheduling.

Facility Improvements During Construction

MGE to install new underground conduits along Atwood Avenue from Fair Oaks Ave to Cottage Grove Rd.

New handholes will be installed at the following locations:

Station 12+55, 25' RT

Station 15+21, 27' RT

Station 19+75, 27' RT

Station 27+93, 50' RT

Station 33+65, 56' RT

Station 38+34, 51' RT

Station 44+40, 58' RT

Station 48+27, 61' RT

Station 53+10, 35' RT

Station 58+16, 38' Rt

New Elbow Cabinets will be installed at the following locations:

Station 24+07, 39' RT

Station 58+08, 38' RT

Station 61+62, 62' LT

New conduit will be installed at the existing R/W line approximately 28' RT +/- between Station 12+55, RT and Station 23+00, RT. The new conduit will run along the north face of the retaining wall between Station 23+00 and Station 23+75 and continues at an approximate offset of 2'-5' RT from the southern edge of the new path along Atwood Avenue to Station 52+00, RT. Between Station 52+00 and 58+20 the conduit is located approximately 30' – 35' RT. Between Station 58+20 and Station 66+75, the conduit is located approximately at 27' RT underneath the proposed sidewalk.

New conduit will cross Atwood at the following locations:

Station 15+03, LT&RT

Station 24+18, LT&RT – This work will need to take place during construction.

Station 61+63, LT&RT

MGE poles to be relocated between property line and new multi-use path. The following existing poles will be relocated to the following new locations:

Ex Pole Station 12+73, 15.6' RT relocated to Station 12+73, 25' RT

Ex Pole Station 13+98, 16' RT relocated to Station 13+98, 25' RT

Ex Pole Station 15+07, 16.5' RT relocated to Station 15+17, 22' RT

Ex Pole Station 14+82, 24' LT relocated to Station 15+93, 24' LT

Ex Pedestal Station 15+24, 29' LT relocated to Station 15+26, 28' LT

Ex Pole Station 16+16, 15.6' RT relocated to Station 16+15, 24' RT

Ex Pole Station 17+36, 16.6' RT relocated to Station 17+35, 26' RT

Ex Pole Station 18+49, 22.1' RT relocated to Station 18+62, 37' RT

Ex Pole Station 19+24, 18.1' RT relocated to Station 19+25, 27' RT

Ex Pole Station 20+33, 17.2' RT relocated to Station 20+30, 25' RT

Ex Pole Station 21+46, 18.3 RT relocated to Station 21+59, 25' RT

Ex. Pole Station 21+57, 26.4 LT to remain

Ex Pole Station 22+32, 16.6, RT relocated to Station 22+31, 25' RT

Ex Pole Station 22+37, 26' LT to remain

Ex Pole Station 23+11, 17.6' RT relocated to Station 23+10, 25' RT – This pole will need to be reset after the old retaining wall is removed during construction.

Ex Pole Station 48+42, 30' RT to remain

Ex Pole Station 49+69, 26' RT relocated to Station 49+69, 29' RT

Ex Pole Station 51+14, 19' RT relocated to Station 51+21, 22' RT

Ex Pole Station 56+78, 18' RT relocated to Station 56+94, 22' RT

Ex Pole Station 56+94, 41' LT relocated to Station 56+94, 41' LT

Ex Pole Station 58+12, 20' RT to remain

Ex Pole Station 59+57, 20' RT to remain

Ex Pole Station 60+98, 18' RT relocated to Station 60+95, 20' RT

Ex Pole Station 62+66, 20' RT relocated to Station 62+66, 23' RT

Ex Pole Station 63+67, 23' RT relocated to Station 63+67, 24' RT

The following existing street light poles will be removed:

Station 52+50, 18' RT

Station 53+93, 18' RT

Station 55+28, 18' RT

The following new poles will be added:

Station 64+40, 28' RT

Station 65+56, 28, RT

Madison Gas and Electric - Gas

Existing Facilities

Buried gas facilities run along the northern terrace between Fair Oaks Avenue and Oakridge Avenue. Facilities are 4" diameter plastic between Fair Oaks Avenue and Ludington Avenue. Between Ludington Avenue and the Starkweather Creek is primarily 2-4" plastic.

Buried gas bisects Olbrich Park between Lakeland Avenue and the Starkweather Creek. The gas crosses the Starkweather Creek where it runs parallel to Atwood Avenue between the creek and Walter Street. The gas facility cuts across the parking lot and connects back to Atwood Avenue at Dennett Drive. The gas main that crosses through Olbrich Park across the Starkweather Creek towards Walter Street and Dennett Drive is a 12" High Pressure (HP) gas main and is approximately 4' deep.

Between Walter Street and Cottage Grove Road, gas facilities run beneath the westbound travel lanes. Additional gas facilities extend north on Walter Street.

Conflicts are anticipated between MGE-Gas facilities and storm sewer facilities throughout the project corridor.

Facility Improvements Prior to Construction

Relocations anticipated to prior to construction

New 6-inch gas main from approximately STA 66+90 LT to Davidson Street.

Facility Improvements During Construction

Relocations during Stage 2A

New 12-inch high-pressure gas main from approximately STA 51+20 to STA 67+62.

- New 6-inch gas main crossing near STA 46+60.
- New 6-inch gas main from STA 650+50 RT to STA 652+72 RT.
- This work will take approximately 20 work days

Relocations during Stage 2A & 2B

- New 6-inch gas main from approximately STA 11+00 LT to STA 24+38 LT, crossing at STA 24+38, from STA 24+38 RT to STA 50+90 RT.
- New 4-inch gas main from approximately STA 12+40 RT to STA 15+80 RT.
- New 2-inch gas main from approximately STA 16+30 RT to STA 20+35 RT.
- Existing services will be connected to new gas main for locations noted above (Stage 2A & 2B).
- This work will take approximately 35 work days

Relocations during Stage 2B

- New 6-inch gas main crossing at STA 50+90, from 76.5' RT to 3' LT.
- New 2-inch gas main from approximately STA 58+50 RT to STA 61+32 RT, crossing at STA 60+93 and connect to existing gas main.
- New service crossings at approximately STA 64+48, STA 65+08 and connect to existing gas main.
- This work will take approximately 20 work days

Relocations during Stage 3A

- New 6-inch gas main crossing at STA 50+90 from 3' LT to 38' LT, from STA 50+90 LT to STA 66+91 LT.
- New 6-inch gas main crossing Dennett Drive, Margaret Street, and Olbrich Avenue.
- New 12-inch high-pressure gas main from STA 101+47 LT to STA 101+72 LT.
- Existing services will be connected to new gas main for locations noted above (Stage 3A).
- This work will take approximately 40 work days

Existing gas main will be discontinued in place. New gas main will be installed a minimum of 36" below final grades. MG&E requests the sanitary sewer be abandoned in place to avoid conflict with gas main from STA 50+10 LT to STA 64+59. MG&E requests the storm sewer for P7-21, P7.2A, P7-17, & P7-24 be completed in Stage 3A to accommodate gas main relocation work.

From STA 52+16 to STA 68+11, existing high-pressure gas main is in the grading limits. Roadway contractor shall use caution to avoid continuous loading on the high-pressure gas main.

Stations and offsets listed above are approximate and may change during coordination with roadway contractor during construction.

Madison Metropolitan Sewerage District

Existing Facilities

MMSD sanitary sewer facilities run outside of the project limits along the Capital City bike trail between Fair Oaks Avenue and Walter Street. From the pump station (PS 06) located near the intersection of the Capital City Trail and Walter Street the force main extends through Olbrich Park across Walter Street to the south where it continues along Atwood Avenue along the southwestern terrace through Cottage Grove Road.

Existing facilities are a 36" force main.

Conflicts with sanitary sewer facilities are not anticipated and are to remain operational during construction.

Facility Improvements

MMSD does not have any plans for improvement to the force main. Perform Utility Line Openings (ULO) as shown on the plans in in the bid items for this project to locate MMSD facilities. Prior to performing

ULOs, follow the Diggers Hotline ticket scheduling process. MMSD will provide exact locations for performing ULOs following the Diggers Hotline request. Once the ULOs have been completed, MMSD will survey/GPS. Contact MMSD once the ULOs have been completed.

Project 5992-10-17

All coordination was completed under Project ID 5992-10-16.

Project 5992-10-18

All coordination was completed under Project ID 5992-10-16.

7. Municipality Acceptance of Sanitary Sewer and Water Main Construction.

Both the department and City of Madison and City of Monona personnel will inspect construction of sanitary sewer and water main under this contract. However, testing and acceptance of the sanitary sewer and water main construction will be by the City of Madison and City of Monona as appropriate. stp-105-001 (20140630)

8. Referenced Construction Specifications.

Construct the work enumerated below conforming to the City of Madison Standard Specifications, latest edition. If there is a discrepancy or conflict between the referenced specification and the standard specifications regarding contract administration, part 1 of the standard specifications governs.

Conform to the referenced construction specifications for the following:

- Sanitary Sewer (all work required in Project 5992-10-18)
- Water Main (all work required in Project 5992-10-18)

stp-105-002 (20130615)

9. Railroad Insurance and Coordination - Wisconsin and Southern Railroad Company.

A Description

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

A.1 Railroad Insurance Requirements

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

Notify evidence of the required coverage, and duration to Amanda Haggerty, Office Administrator; 1890 E Johnson Street, Madison, WI 53704; Telephone (608) 620-2048; E-mail: ahaggerty@watcocompanies.com.

Also send a copy to the following: Teri Beckman, SW Madison Region Railroad Coordinator; 2101 Wright Street, Madison, WI 53704; Telephone (608) 733-1923; E-mail: teri.beckman@dot.wi.gov.

Include the following information on the insurance document:

- Proiect ID: 5992-10-15
- Work Performed: Detour going over two crossing

#	Route Name	City/County	Crossing ID	RR Subdivision	RR Milepost
1	Fair Oaks Ave	Madison, Dane County	177325A	Cottage Grove	79.48
2	Walter Street	Madison, Dane County	177327N	Cottage Grove	78.88

A.2 Train Operation

Approximately 2 switching through freight trains operate daily at up to 5mph to 10 mph.

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

Todd Mulrooney, Superintendent of Engineering, Wisconsin and Southern Railroad Co.; 1890 East Johnson Street, Madison, WI 53704; Telephone (608) 620-2045; E-mail tmulrooney@watco.com for consultation on railroad requirements during construction.

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

Flagging Contact

See Construction Contact. Reference the Crossing ID, Wisconsin Milepost and Subdivision found in A.1.

Cable Locate Contact

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

WSOR will only locate railroad owned facilities located in the railroad right-of-way. The railroad does not locate any other utilities.

A.4 Work by Railroad

The railroad will perform the work described in this section, except for work described in other special provisions, and will be accomplished without cost to the contractor. None stp-107-026 (20220107)

10. Railroad Insurance and Coordination - Wisconsin and Southern Railroad Company.

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

A.1 Railroad Insurance Requirements

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

Notify evidence of the required coverage, and duration to Amanda Haggerty, Office Administrator; 1890 E Johnson Street, Madison, WI 53704; Telephone (608) 620-2048; E-mail: ahaggerty@watcocompanies.com.

Also send a copy to the following: Teri Beckman, SW Madison Region Railroad Coordinator; 2101 Wright Street, Madison, WI 53704; Telephone (608) 733-1923; E-mail: teri.beckman@dot.wi.gov

Include the following information on the insurance document:

- Project ID: 5992-10-16

Project Location: Madison, WisconsinRoute Name: Atwood Ave, Dane County

Crossing ID: 177327N

- Railroad Subdivision: Cottage Grove

- Railroad Milepost: 78.88

 Work Performed on or within 50' of RR ROW: Widening sidewalk to the south of the track to connect sidewalk to Capitol City Trail

A.2 Train Operation

Approximately 0 through freight trains operate daily at up to 10 mph to 25 mph. Approximately 10 switching trains per day.

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

Todd Mulrooney, Superintendent of Engineering, Wisconsin and Southern Railroad Co.; 1890 East Johnson Street, Madison, WI 53704; Telephone (608) 620-2045; E-mail tmulrooney@watco.com for consultation on railroad requirements during construction.

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

Flagging Contact

See Construction Contact. Reference the Crossing ID, Wisconsin Milepost and Subdivision found in A.1.

Cable Locate Contact

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

WSOR will only locate railroad owned facilities located in the railroad right-of-way. The railroad does not locate any other utilities.

A.4 Work by Railroad

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

A.5 Temporary Grade Crossing

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

stp-107-026 (202200602)

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

The department has obtained a U.S. Army Corps of Engineers Section 404 permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the regional office by contacting Lorraine Betzel at (608) 246-3279.

stp-107-054 (20210708)

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

The department has obtained coverage through the Wisconsin Department of Natural Resources to discharge storm water associated with land disturbing construction activities of this contract under the Wisconsin Pollutant Discharge Elimination System General Construction Storm Water Discharge Permit (WPDES Permit No. WI-S066796-1). A certificate of permit coverage is available from the regional office by contacting Lorraine Betzel at (608) 246-3279. Post the permit in a conspicuous place at the construction site.

stp-107-056 (20180628)

13. Environmental Protection, Dewatering.

Supplement standard spec 107.18 as follows:

If dewatering is required, the water must be treated to remove suspended solids before it is allowed to enter any waterway or wetland. Provide a settling basin, or other suitable means approved by the engineer, with sufficient capacity and size to provide an efficient means to filter the water from the dewatering operation before it is discharged back into the stream as provided in the Standard Specifications and these special provisions. Direct discharge into the stream will not be permitted. Saturated sediment shall be dewatered in an upland location within a dewatering device. Treatment practices may include the use of a polymer in conjunction with the dewatering mechanism, as approved by the engineer.

In addition, conform to dewatering guidelines of WisDNR Storm Water Management Technical Standards, Code # 1061, "Dewatering". This document can be found at the WisDNR website:

http://dnr.wi.gov/topic/stormwater/documents/Dewatering 1061.pdf

All work and materials associated with water treatment and/or dewatering will be included in the Excavation for Structures bid item. This shall include furnishing all materials, excavation, maintenance, cleaning, disposal of surplus material, removal of the settling basins after completion of dewatering operations, and for furnishing all labor, tools, equipment and incidentals necessary to complete the work according to the contract.

14. Environmental Protection, Aquatic Exotic Species Control.

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

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

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels before being used in other waters of the state. Before using equipment on this project, thoroughly disinfect all equipment that has come into contact with potentially infested waters. Guidelines from the Wisconsin Department of Natural Resources for disinfection are available at:

http://dnr.wi.gov/topic/invasives/disinfection.html

Use the following inspection and removal procedures:

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

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

15. Construction Over or Adjacent to Navigable Waters.

The Starkweather Creek is classified as a state navigable waterway under standard spec 107.19. stp-107-060 (20171130)

Place navigational buoys 100 yards upstream and 100 yards downstream to mark the Starkweather Creek throughout the duration of the bridge construction.

A copy of the Waterway Marker Application and Permit is available by contacting Lorraine Betzel at (608) 246-3279.

16. Erosion Control Structures.

Within three calendar days after completing the excavation for a substructure unit, place riprap or other permanent erosion control items required by the contract or deemed necessary by the engineer around the unit at a minimum to a height equivalent to the calculated water elevation resulting from a storm that occurs on the average of once every two years (Q2) as shown on the plan, or as the engineer directs.

In the event that construction activity does not disturb the existing ground below the Q2 elevation, the above timing requirements for permanent erosion control shall be waived.

stp-107-070 (20191121)

17. Dust Abatement.

Supplement standard spec 104.6.1 with the following;

Dry brooming of the pavement will not be allowed.

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 a suitable self-contained particulate collector to prevent discharge from the collection bin into the atmosphere.

18. Erosion Control.

Supplement standard spec 107.20 with the following:

Erosion control best management practices (BMPs) shown on the plans are at suggested locations. The actual locations will be determined by the contractor's ECIP and by the engineer. Include each dewatering (mechanical pumping) operation in the ECIP submittal. The ECIP will supplement information shown on the plans and not reproduce it. The ECIP will identify how to implement the project's erosion control plan. ECIP will demonstrate timely and diligently staged operations, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-application of topsoil to minimize the period of exposure to possible erosion.

Provide the ECIP 14 days prior to the pre-construction conference. Do not implement the ECIP until department approval and perform all work according to the approved ECIP.

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

Stockpile excess materials or spoils on upland areas away from wetlands, floodplains, and waterways. Immediately install perimeter silt fence protection around stockpiles. If stockpiled materials will be left for more than 14 days, install temporary seed or other temporary erosion control measures the engineer orders.

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

Do not allow any excavation for structures, utilities, grading, maintaining drainage that requires dewatering (mechanical pumping) of water containing sediments (sand, silt, and clay particles) to leave the work site or discharge to a storm water conveyance system without sediment removal treatment.

Prior to each dewatering operation, submit to the department a separate ECIP amendment describing in words and pictorial format an appropriate BMP for sediment removal, according to WisDNR Storm Water Construction Technical Standard, Code 1061, Dewatering. Include reasoning, location, and schedule duration proposed for each operation. Per Code 1061, include all selection criteria: site assessment, dewatering practice selection, calculations, plans, specifications, operations, maintenance, and location of proposed treated water discharge. Provide a stabilized discharge area. If directing discharge towards or into an inlet structure, provide additional inlet protection for back-up protection. Dewatering is considered incidental to the project.

Keep all public roadways clean and free from dirt and debris at all times. Provide a self- contained mechanical or air conveyance street sweeper and dispose of the accumulated material.

Do not wash out equipment in drainage ways or direct conduits to waters of the state. Keep slurry out of inlets and drainage ways. Remove all temporary erosion control measures after disturbed areas are stabilized or at the direction of the engineer.

19. Preservation of Existing Trees.

Tree preservation is of great importance on the project. Comply with Article 107.13 of the City of Madison Standard Specifications for Public Works Construction - Current Edition. Take precautions during construction so as not to disfigure, scar, or impair the health of any tree on public or private property that is not marked for removal. Do not place, park, or store on the surface of any unpaved areas within the drip lines of trees any equipment, vehicles, or materials. Do not deposit any chemicals, rinsates, or petroleum products within the drip lines of trees. The drip line is defined as the outermost extent of the tree canopy, extended vertically to the ground surface. The engineer and the City Forestry Representative will review trees that are in close proximity to the grading limits of the project and will identify specific trees to be protected. Contact Brad Hofmann, City of Madison Forestry at (608) 220-6796 with questions regarding tree preservation.

Preconstruction Pruning

Trees larger than 10 inches Diameter Breast Height (DBH) will be pruned by City Forestry to an approximate height of 14 feet above the road wherever construction equipment is expected to invade the tree crown. Pruning will be done according to ANSI A300 tree pruning specifications. Occasionally a limb may have to remain at height less than 14 feet above the roadway. Note these instances during the 'walk through' and employ methods to protect the limb.

Excavations

Do not rip or pull roots out towards the trunk of a tree while excavating. The use of an excavator, backhoe, or loader to cut roots is not acceptable. Immediately cut damaged roots over 1/2-inch in diameter in back of the damaged section. Make cuts with a sawsall, lopping shears, chainsaw, stump grinder, or other means that will produce a clean cut. Cover any exposed roots as soon as excavation and installation are complete. Root pruning will be paid under the item Root Pruning Trees.

Underground Utility Excavation and Installation

Do not grade, excavate, or disturb the area within 5 feet of any tree measured from the outside edge of the tree at DBH along the length of the terrace, without permission from the City Forestry Representative. The engineer and the City Forestry Representative will review laterals that are in close proximity to terrace trees on a case by case basis. The engineer may elect to terminate lateral or service installation prior to conflict with tree roots (i.e., at the curb line). For laterals that continue to the property line, use construction methods that minimize tree damage as directed by the engineer. The engineer may elect to reroute conduit for lighting around the tree roots if going through will cause damage to the tree. The engineer may allow boring under or within the 5 feet protection zone.

Curb and Gutter Removal and Replacement

Provide extra care to root masses that grow very close to, up to or over the curb during excavation. The City Forestry marks "NRC" (No Root Cutting) next to trees with roots that could be damaged in curb removal.

City of Madison Forestry staff must be present for removal, excavation, and forming of curb and gutter for the tree located at Station 52+63, 34' LT. Contact the City Forestry department a minimum of 3 days prior to performing this work.

Sidewalk Removal and Replacement

Provide extra care to root masses that grow very close to the sidewalk during excavation. The City Forestry marks "NRC" (No Root Cutting) next to trees with roots that could be damaged in sidewalk removal.

City of Madison Forestry staff must be present for removal, excavation, and forming of sidewalk for the tree located at Station 52+63, 34' LT. Contact the City Forestry department a minimum of 3 days prior to performing this work.

Contact City of Madison-Forestry, Brad Hofmann, (608) 220-6796 prior to excavation for sidewalk adjacent to tree Station 53+75, RT and 55+80, RT

Terrace Restoration

Do not mechanically grade within 5 feet of any tree. If in the root protection zone, the distance is 10 feet, grade with hand implements in a manner that will minimize damage to the root system.

Damages

Failure to follow the proper safeguards of this specification, or the Root Pruning Trees Bid Item will result in the following cost recovery charges and liquidated damages assessed against the contractor:

Where construction damage occurs causing or resulting in removal of the tree, the following damages will be assessed against the contractor:

- The costs associated with removing the tree including wood disposal.
- The costs associated with removing the stump to a depth of at least 24 inches below the ground.
- The costs associated with replanting a replacement tree that is balled and burlapped and a minimum caliper diameter of 3 inches. The species and replanting location will be determined by the City Forestry.
- The value of the existing tree which will equal \$125.00 per trunk diameter inch, measured at 4.5 feet above ground.

For bark scraping and broken branches the following damages will be assessed against the contractor:

- The costs associated with pruning broken branches, including wood disposal.
- Loss of limb or broken branch larger than 3 inches in diameter: \$150.00 for each occurrence.
 Breakage of limbs that are less than 14 feet above the roadway shall be reviewed on a case by case basis.
- Damage to trunk or bark larger than one square foot in area: \$400.00 each area.

For root cutting or excavation within the root protection zone the following damages will be assessed against the contractor:

- For mechanical excavation within 5 feet of a tree, along the length of the terrace or sidewalk of the tree, including ripping of roots back towards the trunk, without prior permission from City Forestry Representative: \$150.00 for each occurrence.
- For mechanical excavation beyond 6 inches or 1 foot of the proposed curb installation, as determined by the size of the existing tree and terrace width, including ripping of roots back towards the trunk: \$150.00 for each occurrence.

20. Archaeological Site – Memorial Park Site.

The Memorial Park site (47DA0560/BDA0269 and 47DA0851/BDA0600) is located approximately within Olbrich Park along Lakeland Avenue (Station 97+00 – Station 107+00) within the limits shown on the plans.

Notify the Bureau of Technical Services – Environmental Process and Document Section (BTS-EPDS) at (608) 266-0099 at least two weeks before commencement of any ground disturbing activities. BTS-EPDS will determine if a qualified archaeologist will need to be on site during construction of this area.

Do not use the site for borrow or waste disposal. Do not use the site area not currently capped by asphalt/concrete for the staging of personnel, equipment and/or supplies.

stp-107-220 (20180628)

21. Public Convenience and Safety.

Revise standard spec 107.8(6) as follows:

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

stp-107-001 (20060512)

22. Coordination with Businesses and Residents.

The contractor shall attend the preconstruction meeting hosted by the City of Madison prior to the start of construction.

Place "Access to Local Businesses" signs on temporary sign posts as shown in the plans. Place business signs provided by local businesses affected by construction on temporary barricades.

Coordinate with local residents and businesses to coordinate sidewalk closures immediately adjacent to the properties to ensure proper access is maintained for the duration of the sidewalk closure.

23. Signing.

The City of Madison Traffic Engineering Division will remove existing City of Madison signs and sign posts as shown in the plans. Contact Chad Veinot, City of Madison Traffic Engineering at (608) 267-1960 at least ten days prior to starting construction to arrange to have signs removed. Sign support bases are to be removed and disposed of by the contractor.

The City of Madison Traffic Engineering Division will be installing signs as shown in the plans. Contact Chad Veinot, City of Madison Traffic Engineering at (608) 267-1960 at least ten days prior to installing new sign support bases and sign posts to arrange for signing installation.

24. General Provisions for Storm Sewer.

Contact Information:

Chris Scharf

City Engineering - Construction

Phone: (608) 267-1973

E-mail: cscharf@cityofmadison.com

Janet Schmidt

City Engineering – Stormwater Section

Phone: (608) 261-9688

E-mail: jschmidt@cityofmadison.com

Jaime Kurten

MSA Professional Services - Design Consultant

Phone: (608) 242-6619 E-mail: jkurten@msa-ps.com Construct all round storm sewers according to the pertinent provisions of standard spec 608, and 611 as shown on the plans, and as follows.

Prior to ordering drainage pipes and structures, verify related drainage information in the plan with the engineer. This shall include all information obtained from the bid item "Utility Line Opening" (ULO).

Seal the joints for reinforced pipe with internal rubber gaskets as described in standard spec 608.2. The use of mastic joint sealer or mortar as a pipe joint method is prohibited.

Lay all round storm sewers on a 6-inch minimum thick bed of Base Aggregate Dense Graded 1 1/4-Inch according to subsection 305.2.1 of the standard specifications or when water is encountered, No. 1 coarse concrete aggregate according to standard spec 501.2.7.3. Bedding for round pipe shall be incidental to the installation costs of the round pipe.

All filed poured storm structures shall be constructed rectangular in shape, unless noted otherwise. However, if a precast structure is approved, the requirement for a rectangular structure is waived. Construct catch basins, manholes and inlets using only precast or cast in place concrete masonry options. All structures shall be reinforced concrete. Concrete brick and block options are prohibited.

Construct all structures (manholes and inlets) on a 12-inch minimum thick bed of Base Aggregate Dense Graded 1 1/4-Inch according to standard spec 305.2.1 or when water is encountered, No. 1 coarse concrete aggregate according to standard spec 501.2.7.3, and as shown on the plans. Bedding for structures shall be incidental to the installation costs of the structure.

Bid all structures (manholes and inlets) as field poured and construct all structures as field—poured unless the contractor receives approval of the City of Madison design engineer to precast the structures. This approval will not be given until it can be confirmed that the proposed design will fit existing conditions including possible utility conflicts.

All box culvert material submittals must be approved and stamped by a professional engineer licensed in the State of Wisconsin.

The contractor shall abide by the following guidelines when installing box culverts:

- 1. The subgrade for the boxes shall have WDOT TYPE HR filter fabric placed on all exposed subgrade areas prior to placement of the bedding stone for the boxes, this includes excavated for undercut if required. Fabric as described above shall be considered incidental to this item.
- 2. Bedding stone shall consist of 1 foot of 3 inch clear stone shall be placed on the geotextile as bedding stone and shall extend a minimum of 1 foot past the outside edge of the box. One vertical foot of bedding stone shall be considered incidental to this item.
- 3. Box backfill shall be completed with select fill as specified. Compaction shall be required in 8-inch maximum lifts. If additional undercut is required for base stabilization, undercut shall be paid for under the respective pay item. Three-inch clear stone shall be required to be used in areas of undercut and fabric shall be place as described above. Additional materials necessary for the backfill in the undercut area shall be placed according to City of Madison SDD 5.2.2, Storm Sewer Bedding and Backfill as shown in the plans. All additional clear stone necessary in areas of undercut will be paid for separately under the respective pay item. All backfill shall be paid for under the trench backfill pay item.
- 4. The joints of the box culverts shall be sealed as follows:
 - a) The full interior of the joints of the box shall be sealed with cold plastic trowelable sewer joint compound or two appropriately sized mastic "ropes" (commonly products include Pro-Stik and EZ-Stik) around the entire joint of the box. Rubber gaskets may be allowed upon completion of a specification review and approval by the engineer.
 - b) The exterior joints of the box shall be sealed with a 12" wide butyl exterior joint wrap (common products include EZ-Wrap and ConSeal). The exterior joints shall be fully wrapped on the sides and roof of each box joint.

No precast approval shall be authorized for any structure until such time as all ULO's that could affect the structure/structures in question have been completed.

The ULO information will be reviewed by the city's consultant for potential conflicts or redesign. Upon completion of the ULO information, the city's consultant shall be provided the information for revision of the storm sewer design as necessary. Once the design has been reviewed or modified, any revisions to the precast submittal shall be provided for review and approval. The precast submittals shall include any revised designs as necessary for consideration. The city's consultant shall forward on any design

revision and shop drawing submittals for city design engineer to review. The city design engineer shall have three days to approve or reject shop drawings designs as necessary for consideration. Submit shop drawings for all precast structures to the city's consultant, who will review and forward on for the city's approval.

Do not use station and offset for inlet structures, as given on the storm plans, for final layout of the structure. Determine the curb line in the area of the inlet prior to pouring the inlet structure to assure proper location of the inlet relative to the curb line.

The costs to connect storm sewer to existing structures or pipes and the costs to plug pipes for future use including tapping the hole, placing the pipe and sealing the joint, furnishing and installing a plugging device as specified above, will be included in the unit price bid for the pipe of the type, class and diameter used. The cost includes installing a concrete plug in the portion of the abandon pipe that remains in place after completion of storm sewer trench. All private storm connection to a new structure are incidental to the new structure. If a private connection is not shown on the plan, additional compensation shall be paid for as a private reconnection unless the structure is field poured.

Carefully remove and stockpile all existing inlet, manhole, and catch basin covers that are not being adjusted and reused on the project at a location on the right-of-way outside the construction limits for pickup by City of Madison personnel. Contact Chris Scharf to schedule pickup.

Remove from the right-of-way and dispose of all frames or grates and all other material that the city does not want.

Remove any steps that were provided or installed for the structures prior to acceptance.

25. General Provisions for City of Madison Sanitary Sewer.

Contact Information

Madison Sewer Utility
Mark Moder

Phone: (608) 261-9250

Email: mmoder@cityofmadison.com

Utility Standard Specifications

Perform work according to these provisions and the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction and the City of Madison Standard Specifications for Public Works Construction-Latest Edition, hereinafter referred to as the City Standard Specifications.

Work Sequence

Contact the identified person above 10 working days prior to starting work on the sanitary sewer and provide a schedule of operations. Construct sanitary sewer main and laterals in stages according to the traffic control plan and in proper coordination with construction for activities adjacent to the sanitary sewer main.

Furnish and install any temporary connections, couplings, fittings, and associated accessories necessary to maintain service for the duration of each stage until the permanent connection can be completed. All temporary connections are incidental to the bid items being installed.

Provide bypass pumping of sanitary sewage to maintain sanitary sewer service when new sewer access structures are being constructed over the existing mains.

Shop Drawings and Samples

Submit shop drawings and samples to the engineer and City of Madison Engineering Department as required in these Special Provisions and for the following:

- Sanitary Sewer Pipe Material.
- Sanitary Sewer Access Structure Casting and Manhole Covers Type J (Madison logo lid).
- Sanitary Sewer Internal Chimney Seal.

- Sanitary Sewer Access Structure (4-Foot Diameter).
- Sewer Electronic Markers.
- Select Fill for Sanitary Sewer.

Contractor's responsibilities include:

- Review shop drawings and samples prior to submittal.
- Determine and verify field measurements, field construction criteria, catalog numbers and similar data, and conformance with specifications.
- Coordinate each submittal with requirements of work and of Special Provisions.

Notify City Engineer or City Engineer's Representative, in writing, at time of submittal of deviations in submittals from requirements of special provisions.

NOTE: Do not begin any fabrication or work listed above as requiring shop drawings or samples until return of submittals with City Engineer's or City Engineer Representative's approval.

Provide shop drawings containing the following:

- Date of submittal and dates of previous submittals.
- Project title and number.
- Contract identification.
- Names of contractor, supplier, and manufacturer.
- Identification of product, with identification numbers, and drawing and specification section numbers.
- · Field dimensions clearly identified.
- Identification of details required on drawings and in specifications.
- Manufacturer and model number (give dimensions and provide clearances).
- Relation to adjacent or critical features or work or materials.
- Applicable standards, such as ASTM, and identification of deviations from contract documents.
- Source of samples and material properties.
- Identification of revisions on re-submittals.
- Eight-inch and three-inch blank space for contractor and City Engineer stamps.
- Contractor's stamp, signed, certifying to review of submittal, verification of products, field measurement, field construction criteria, and coordination of information with submittal with requirements of work and special provisions.

If required by the City Engineer or City Engineer's Representative, resubmit shop drawings that include the following:

- Corrections or changes from previous submittals as indicated by City Engineer or City Engineer's Representative. Re-submittals are required until approved.
- Shop Drawings and Product Data: Review initial drawings or data and resubmit as specified for initial submittal. Indicate changes, which have been made other than those requested by City Engineer.

Testing and Acceptance

Submit materials production and field placement testing results as required by the City Standard Specifications or as required by the City Engineer or City Engineer's Representative. Final acceptance of sanitary sewer and related materials such as backfill, slurry, etc. will come from the City Engineer or City Engineer's Representative.

Allow the City of Madison to sample/test materials as requested. Provide complete copies of required submittals as follows:

Shop Drawings: Six copies.

Sampling/Testing Results: Three copies.

Deliver required copies of submittals and testing results to:

Mark Moder

City of Madison, Department of Public Works

City-County Building, Room 115, 210 Martin Luther King Jr. Boulevard

Madison, Wisconsin 53710.

The City Engineer or City Engineer's Representative will review and return shop drawings to the contractor within one week of date of receipt.

Protection of Sewers

Take adequate measures to prevent impairment of operation of existing sanitary sewer and storm sewer systems. Prevent construction material, concrete, earth, or other debris from entering sewer or sewer structure.

Divert sewage flow interfering with construction to sanitary sewers leading away from construction area. Prior to commencing excavation and construction of work impacting existing city sewer, submit to City Engineer for review, detailed plans, including routing and connections, required to handle and dispose of sanitary wastes. By reviewing the plan, the City Engineer neither accepts responsibility for adequacy thereof nor for damages to public or private property resulting there from, such responsibilities remain with the contractor.

Sanitary sewer damaged or removed during construction, which is to remain in service, shall be restored or replaced to original material and workmanship used for original construction.

All City of Madison manhole castings removed from sewer access structures (removed, abandoned, or swapped out with a casting elevation adjustment) shall be delivered to City Engineering's Service Building, 1600 Emil Street, Madison, WI 53713.

The costs to remove all abandoned utility pipes within the new sanitary sewer pipe trench or new sewer access structure excavation will be included in the unit price bid for the new pipe of the type, class and diameter used. The cost includes installing a concrete plug in the portion of the abandon pipe that remains in place after completion of sanitary sewer trench.

According to the City Standard Specifications, "Pipe to be removed that is in the same trench as a new pipe will not be compensated as remove pipe and will be considered to be incidental to the new pipe installation." Same trench will be considered to be any pipe located with 3 feet horizontally of the pipe being installed.

City of Madison (sanitary sewer) has underground facilities located within the project area. Relocation of the underground facilities shall be accomplished as part of contract 5992-10-18 by the contractor. Existing facilities and anticipated proposed relocations are as follows:

Atwood Avenue – Station 15+26.80, 5' RT to Station 24+02.87, 14.72' LT. Remove and replace sewer (8")

Atwood Avenue - Station 50+12.00, 16.50' LT to Station 51+37.25, 16.50' LT. Remove and replace (8")

Atwood Avenue - Station 51+48.85, 16.50' LT to Station 64+58.98, 17.89' LT. Remove and replace (8")

Welch Avenue – Station 18+71.26, 10.75' RT to Station 18+92.50, 12.50' RT. Remove (6") and replace (8")

Center Avenue – Station 21+32.37, 6.99' RT to Station 21+35.00, 5.50' RT. Remove (6") and replace (8")

Walter Street – Station 46+19.42, 61.02' LT to Station 46+58.78, 59.84' RT. Remove (6") and replace (8")

Sanitary sewer removals, replacements, and adjustments are included as part of the project as shown on the plans. Complete all work within the existing right-of-way. Coordinate operations with the City of Madison. Contact Mark Moder, (608) 261-9250.

Site Dewatering

All Groundwater Dewatering for the installation of the City of Madison sanitary sewer will be incidental to the sewer main, lateral, and sewer access structure being installed.

Dewater the site during construction or working with the water on-site in a manner that allows the project to be constructed according to the plans and specifications. This item includes removal of any water entering a trench or excavation including but not limited to groundwater, surface water runoff and/or trench dewatering.

Groundwater is expected to be encountered during excavation for the sanitary sewer. Provide and maintain ample means and devices with which to promptly remove all water entering excavations, trenches, and other parts of the work and keep said excavations dry until the structures to be built therein are completed.

Installation of concrete or masonry structures will not be acceptable if placed in water or if water is allowed to rise over masonry or concrete and there is danger of flotation or of setting up unequal pressures in the concrete until the concrete has set at least 24 hours and any danger of flotation has been removed.

The contractor is responsible for all work, materials and equipment required to comply with permit conditions to dewater the site. At a minimum, pump water into a settling tank, or alternate method approved by the engineer, to settle solids prior to discharge into the storm sewer for clean water and into the designated sanitary sewer for potentially contaminated water.

Provide all equipment and personnel necessary to conduct dewatering operations as required for the proper completion of the work. Prepare a dewatering plan and submit it to the engineer for review and approval prior to starting dewatering operations. The plan shall include a description of the proposed dewatering methods and maps or drawings indicating the location of the dewatering facilities and points of surface discharge of the water.

The contractor is solely responsible for choosing a method of water control that is compatible with the constraints defined. The contractor is responsible for the adequacy of the water control system and will take all necessary measures to ensure that the water control operation will not endanger or damage any existing adjacent utility or structure.

Design, install and operate the method or methods of water control in such a manner as to provide satisfactory working conditions and to maintain the progress of work. Design the methods and systems so as to avoid settlement or damage to adjacent property according to the applicable legislative statutes and judicial decisions of the State of Wisconsin. All required pumping, drainage and disposal of water will be done without damage to adjacent property or structures, or to the operations of other contractors and without interference with the access rights of public or private parties.

Review and approval of the dewatering plan does not relieve the contractor of the dewatering requirements stated in these specifications. The engineer assumes no liability for the performance or safety of the dewatering system.

Obtain all applicable State of Wisconsin permits for all groundwater control wells including, if necessary, the Wisconsin Department of Natural Resources (WDNR). Drill and seal all wells according to requirements of the WDNR for installing and abandoning wells. According to Paragraph 144.025(2)(e), Wisconsin Statutes, permits are required for all groundwater control wells that singly or in aggregate produce 70 or more gallons per minute. Drill and seal all wells according to requirements of the WDNR for installing and abandoning well.

If necessary, the WDNR address for obtaining well permits is:

Wisconsin Department of Natural Resources Private Water Supply Section Box 7921 Madison, Wisconsin 53707

File a copy of the permit with the City of Madison 48 hours prior to commencement of dewatering.

The contractor shall be solely responsible for choosing a method of groundwater control which is compatible with the constraints defined. The contractor shall be responsible for the adequacy of the groundwater control system and shall take all necessary measures to ensure that the groundwater control operation will not endanger or damage any existing adjacent utility or structure.

Water shall not be allowed in trenches while pipe is being laid.

The method or methods shall be designed, installed and operated in such a manner to provide satisfactory working conditions and to maintain the progress of work. Design the methods and systems so as to avoid settlement or damage to adjacent property according to the applicable legislative statutes and judicial decisions of the State of Wisconsin. Perform all required pumping, drainage and disposal of

groundwater without damaging adjacent property or structures, or the operations of other contractors and without interfering with the access rights of public or private parties.

No masonry shall be installed in water, nor shall water be allowed to rise over masonry or concrete if there is danger of flotation or of setting up unequal pressures in the concrete until the concrete has set at least 24 hours and any danger of flotation has been removed.

Dewater in such a manner that assures safe working conditions and provides stable trench side slopes and trench bottom for adequate support of the pipe and appurtenances. Dewater sufficiently to minimize or eliminate groundwater pressures below the proposed trench bottom which otherwise may tend to cause boiling or a "quick" condition at the trench bottom. Where silty sands or other impervious soils are encountered at and/or below the pipe zone, the dewatering equipment must be adequate to relieve the groundwater pressure below the impervious soil layer and accomplish sufficient drainage of the impervious soils to provide a stable trench bottom.

Pump water from dewatering operations directly to a minimum 1,500 gallon holding tank to allow for settlement of large solids. Periodically pump water from the top of the settling tank into the storm sewer system.

Notify the engineer at least three days in advance of any proposed changes to the dewatering plan.

Properly remove and/or abandon dewatering wells. Remove and/ or abandon wells according to all state and local regulations.

Obtain permission to use any storm sewers, or drains, for groundwater disposal purposes from the City of Madison. It shall be the contractors' responsibility to identify and obtain any permits required for the discharge of groundwater to the surface or to a sewerage system. Do not cause flooding by over-loading or blocking up the flow in the drainage facilities and leave the facilities unrestricted and as clean as originally found. Repair all damage to facilities or restore as directed by the City of Madison Engineering Department, at no cost to the department.

Any flooding or erosion damage caused by dewatering operations is the responsibility of the contractor. If flooding or erosion damage occurs, take immediate steps to eliminate those conditions and to correct any damage. The control of all surface and subsurface water, ice, and snow are considered part of the dewatering. Erosion control shall be exercised at all times, including the placement of silt fences, sedimentation basins and any other devices necessary for proper control.

Provide stand-by equipment to maintain continuous dewatering in the event of mechanical breakdown to part of the system.

The contractor is responsible for removal and/or abandonment of dewatering wells. Removal and/or abandonment shall conform to all state and local regulations.

No disposal fees are required by the City of Madison for discharge to the storm sewer system. The contractor shall pay all other permit fees.

26. General Provisions for City of Monona Sanitary Sewer Construction.

This article contains the general provisions for construction and adjustment of the City of Monona's sanitary sewer within the project limits.

27. General Provisions for City of Madison Water Main Construction.

Contact Information:

Madison Water Utility Pete Holmgren, P.E. Phone: (608) 261-5530

E-mail: pholmgren@madisonwater.org

Madison Water Utility Jeff Belshaw, Construction Supervisor

Phone: (608) 261-9835

E-mail: jbelshaw@madisonwater.org

Utility Standard Specifications: Perform work according to these provisions and the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction and the City of Madison Standard Specifications for Public Works Construction-Latest Edition, hereinafter referred to as the City Standard Specifications. In the event of a conflict the Wisconsin Department of Transportation Standard Specifications will take precedence.

Work Sequence: Contact the identified persons above 10 working days prior to starting water main work and provide a schedule of operations.

Note that many portions of the existing water system along these project limits are located at or near the extent of the Madison Water Utility service area and are often supplied from only one direction, rather than multi-feed/looped water supply systems. Subsequently, inadvertent valve operations could result in unanticipated customer service interruptions. Consult with the Water Utility Engineer and/or Water Utility Construction Inspector prior to installation of new water main segments to establish and confirm pressure zone adjustments, valve sequencing, and notification requirements prior to each water system connection. Provide at least 2-business days' notice to Madison Water Utility ahead of any anticipated valve operation.

Construct water main and water service laterals in stages according to the traffic control plans and in proper coordination with construction activities adjacent to the water main. Furnish and install any temporary connections, couplings, fittings, and associated accessories necessary to maintain service for the duration of each stage until the permanent connection can be completed. All temporary connections are incidental to the bid items being installed.

As construction staging and sequence allows, disinfect the new water mains. Madison Water Utility will flush and test all newly installed water mains. Coordinate as necessary with Madison Water Utility for these operations. After the water main has passed bacteriological and pressure testing, as applicable, install replacement water services and make connections to the existing water system. If required, abandon existing water main only after the new water main has passed all required testing, new main has been properly brought online into the system and all service laterals, except those called to be abandoned, have been relocated to the new main.

Keep valves at connection points between the new water main and the existing water main closed until the new water main has passed all testing. Where new valves need to be opened to fill the new water main for testing and flushing, sequencing shall be so arranged to preclude backflow of any water from the new water main to the existing water main.

Hydrants: Determine the location of the curb line, sidewalk limits, and existing utilities in the area prior to hydrant installation to assure the proper location of the hydrant relative to the curb line. This work is considered incidental to the new water main installation.

Where needed, use offsets and/or bends on the hydrant lead such that the hydrant is installed at a minimum bury depth of six feet and required clearances with storm sewer, sanitary sewer and other pipes are maintained. In no case may a hydrant be set at a depth greater than nine feet from grade. Assess the need for hydrant extensions. All hydrant extensions and fittings on the lead are incidental to the installation of the hydrant.

Either permanently abandon or securely bag any installed hydrant, either existing or new, that is not supplied by an in-service main overnight or for longer than twelve hours until the hydrant is permanently abandoned or back in service.

Temporary Flushing Hydrants: The installation of temporary flushing hydrants may be desired as part of the phasing and sequencing of water main installation. The furnishing, installation, use and abandonment of temporary flushing hydrants is considered incidental to water main installation.

Temporary Air Bleed: Where any installation of proposed water main does not have an adjacent hydrant or other means of bleeding air from the main, install a temporary 2-inch corporation stop at the high point of the main. Remove the stop and plug the opening after successful completion of water main testing. Installation, use, maintenance, removal and plugging of corporation stops for use as air bleeding devices are considered incidental to the installation of water main.

Abandoned Facilities: Abandoned facilities may exist within the project limits and utility companies will be abandoning some additional facilities in place after relocating facilities to avoid conflicts with the proposed work. Removal by the contractor of any abandoned facilities necessary to complete the proposed work, including plugging the remaining ends of the facility, is considered incidental to the contract. Contact each utility company individually to verify if any can be expected and to possibly obtain

facility maps for approximate locations. The costs to remove all abandoned utility pipes within the water main trench or related excavation will be included in the unit price bid for the respective bid item. The cost includes installing a concrete plug in the portion of the abandoned pipe that remains in place after completion of the trench or excavation.

Location of Existing Water Service Laterals: The horizontal location and size of all water laterals indicated on the plans is taken from surveys, approximate measurements, and the city's available records. These records are not guaranteed to be accurate in all cases and do not indicate at what depths these laterals are located. As such, determine the location and size of the existing laterals before making a tap into the new water main. Follow the plans to determine which services are to be abandoned, reconnected, extended, or replaced to the property line.

Location of Existing Water Facilities: The horizontal and vertical location and size of all existing water mains indicated on the plans is taken partially from surveys, approximate measurements, and the city's available records. These records are not guaranteed to be accurate in all cases. Due to the unverified depth and location of existing pipelines, alteration of the lines and grades shown on the plans for new pipelines where connections are to be made to existing pipelines may be necessary. Notify the engineer of locations where alterations of the lines and grades shown are necessary so that an acceptable solution can be determined.

28. General Provisions for Conduit Installation.

Supplement standard spec 652 as follows:

Use Schedule 80 conduit under all traffic areas. Install all conduit at a minimum depth of 30 inches, unless otherwise approved by the engineer. Solvent weld all joints. Mark the location of each conduit, where conduit crosses traffic areas, by a permanent chiseled arrow or other appropriate permanent stamp in top of the curb head.

Install and connect all conduit to the concrete bases, manholes, handholes, existing conduit, or conduit elbows so as to provide a continuous network, unless otherwise indicated on the plan. All connections shall be watertight. Do not install drainage holes in conduit. Uncover the ends or mid-sections of all existing conduit that is being extended by or incorporated into this project work.

When connections are to be made to an existing conduit, first verify that the existing conduit is fully clear and useable for its entire cross-section and length. When the existing conduit is found to be defective, notify the engineer and do not proceed until the engineer so directs. If the contractor connects to an existing defective conduit without the express direction from the engineer, make any and all necessary repairs and replacements to all conduits, including conduit that was "existing" prior to the contractor starting work and to the satisfaction of the engineer. All costs of this work shall be at the expense of the contractor.

Where conduits terminate in a non-paved location and not in a structure, securely attach a PVC cap at the end at conduit depth of 30". Where conduit runs parallel to curb and gutter, place the conduit within 12 inches of the back of the curb, except as directed by the engineer. The engineer will determine termination points not within pull boxes or concrete bases.

Unless the contract provides for installation of cable, cap the ends of each run of conduit with standard conduit caps or otherwise appropriately plug the ends to preclude infiltration of water and soil. Install a pull wire in each conduit, except those with only streetlight wire. A pull wire shall be approximately 4 feet longer than the conduit run and shall be doubled back for at least 2 feet at each terminal. The pull wire shall be #10 AWG copper, stranded, with THHN insulation and green color coding. Install the pull wire

within seven days of completing a conduit installation from structure-to-structure.

Use a 6-inch minimum sand padding below the conduit and a 6-inch minimum sand lift above the conduit. Do not backfill trench with any rocks larger than 4 inches in diameter or any foreign debris.

29. General Provisions for City Traffic Signals.

Perform all work on the lighting and conduit/pull box system according to the Wisconsin Electrical Code, the applicable provisions of the standard specifications, and these special provisions and plans.

The City of Madison will remove existing traffic signals and "signal only" poles when the temporary signals are in place at each intersection. Contact Michael Bensczhawel at the City of Madison Traffic

Engineering Shop, (608) 266-9031, to coordinate removal of existing signals and installation of new signals.

Remove existing streetlight poles identified for removal, including those that also have traffic signal equipment on them.

Each pedestrian push button installation shall include "Push Button for Walk Signal" signs. Single direction arrow signing shall also be used with all buttons except two direction arrow signing is needed for single buttons on median poles.

If existing conduits, handholes and bases designated as "save" cannot be saved, contact Jerry Schippa, (608) 267-2969, for further direction.

All new electric services shall be metered power, 100 amperes, 120 volt, CG-3 rate. A minimum of 6 feet separation shall be maintained between any adjacent loop detectors.

30. General Provisions for City Electric Systems.

A General Requirements

Perform this work according to the Wisconsin Electrical Code, National Electrical Contractor's Association (NECA) electrical construction practices, OSHA and the standard specifications.

Perform all work on the lighting and conduit/pull box system according to the Wisconsin Electrical Code, and applicable provisions of standard spec 659, and these special provisions and plans.

Carefully remove and salvage the steel frames and covers from all pull boxes and manholes to be removed or abandoned, and all street light poles, arms, transformer bases, fixtures, concrete handholes, and associated equipment. Material designated by the city to be saved shall be returned to City Traffic Engineering, 1120 Sayle St., Madison.

Complete electrical work by a journey-worker electrician or be completed by an electrical apprentice under the supervision of a journey-worker electrician. Legal status or standing as a journey-worker and apprentice electricians shall be certified or otherwise documented to the engineer before beginning any electrical work. Electrical work is hereby defined as electrical and related construction required to be performed under the contract by the contractor, according to the standard specifications, contract provisions, standard detail drawings and plan details applicable to electrical construction. At the preconstruction conference, supply the engineer with a list of names and qualifications of journey-workers and/or electrical apprentices who will or may be working on this contract.

Proof of qualification to do electrical journey-worker level work shall be the "Completion of apprenticeship" certification card issued by an approved state agency, or a resume showing sufficient electrical education and a minimum of 14,000 hours of varied electrical work experience. All apprentices shall be indentured by an approved state agency.

The contractor is hereby advised that electrical apprentices must work under the terms of their indentures, which require an apprentice be under the direct supervision of a journey-worker with the exception of an apprentice in the final year as an apprentice. Any violation, or suspected violation, of these terms will be reported to the Bureau of Apprenticeship Standards.

On completion of the work, test the installation and ensure that it is entirely free of grounds and short circuits. This contract contemplates and intends a complete and operating installation of electrical work. Everything in the form of labor or material necessary for this result is in the intent of the contract.

It must be understood that electrical drawings and details are diagrammatic; they are not intended to be shop drawings. It is expected it may be necessary to move conduit, and/or equipment in some cases, to get a coordinated installation. Such changes are considered part of the contract obligation, without cost to the owner. Do not locate any equipment where its usefulness and/or operation may be affected by the work of other trades, door swing, counter, equipment, etc.

The contractor acknowledges his acquaintance with the plans and specifications and their respective requirements and shall guarantee the electrical system has been installed strictly according to the electrical plans and specifications, using only the best of materials available and installed in a substantial manner by experienced labor. The contractor agrees to replace and/or repair items failing from causes of faulty workmanship, material or design, without extra cost, at any time within one year from the date of final acceptance.

Furnish the City of Madison with service manuals for all items furnished under this contract. Service manuals shall be complete with drawings, diagrams, operation and installation instructions, and parts lists.

New streetlight wire in conduits shall consist of (3) #4 and (1) #8 green wire. The color coding for the #4 wire shall be one black, one red, and one white.

Ground wires shall have green insulation or be marked with green tape at all junction or pull boxes and at all terminations. Equipment and enclosures shall be grounded, ground connection surfaces shall be cleaned, and connections shall be made so it is impossible to move them.

All maintenance of existing street light facilities within the project limits, and street lights outside the project limit but serviced by electrical services within the project limit shall be the contractor's responsibility. Maintain the new street lights until project work is accepted. This work shall be considered incidental to installation of street light units, temporary lighting, structures and ducts, and no separate compensation will be paid.

Extend existing lighting circuits to feed the new and relocated lights as part of this project. Verify the existing loads of each lighting circuit before adding additional load to a lighting circuit. Loading on any circuit shall not exceed NEC requirements.

Submit one copy of as-built plans, including cable and conduit routing diagrams, wiring of fixtures and other pertinent details, to the engineer and the City of Madison.

Furnish equipment and appliances necessary to test the complete installation of electrical conductors. Test and demonstrate to the satisfaction of the engineer that the circuits are properly connected, continuous and free from short circuits and unspecified grounds, that the circuits are connected according to the manufacturer's wiring layout, and that each circuit is operational. The lighting system shall not be deemed complete until the electrical work has been completed and the electrical systems are found to be in proper working order, including operation for ten consecutive nights without failure.

B Materials

All materials furnished by the contractor for lighting installation under this contract are subject to approval by the engineer.

Manufacturers shall be responsible for providing materials listed by UL or other approved agencies and all governing codes and ordinances. Materials must bear a UL and/or other approved labels, where possible. Items specified by catalog number of brand name and shop drawing approval will not relieve the manufacturer of this responsibility. All electrical material for which a standard has been established by the Underwriters Laboratories, Inc. shall be furnished and installed under this contract. Material shall have

the UL label firmly attached and be listed by UL Listing signifies that the material has passed the established standard testing. All electrical materials shall conform to the latest requirements of the Wisconsin Electrical Code.

All materials, not specified herein, used in the work shall conform to the requirements specified on the plan or the contract special provisions.

Furnish and install incidental items, such as wire nuts, grommets, tape, connectors, and electrical varnish that are obviously necessary to make the proposed system complete from the source of supply to the most remote unit.

Touch up mars and scratches on painted equipment with two coats of synthetic resin enamel or as directed by the engineer. Furnish a complete list and cut sheets/shop drawings of materials to be furnished and used for lighting. Include the names and addresses of manufacturers, together with

catalog numbers, certificates of compliance, specifications, and other product information requested by the engineer. Submit the list and cut sheets/shop drawings within 20 calendar days of the award of the contract. Do not incorporate any materials into the lighting system prior to obtaining the written approval of the engineer. Approval does not change the intent of the specifications. Do not substitute any materials. The contractor is allowed up to two submittals of material for approval. If more than two submittals are required, the contractor will be charged on a time-and-material basis for additional review time with payment made before submittals will be reviewed.

C Splices

Splices shall comply with standard spec 659.3.2. All splices within a junction box, handhole, etc. shall be of the same type. No splices are allowed in underground pull boxes, except for grounding conductors.

D Circuit Identification

Accomplish color coding by using cable jackets of the proper color. Code all tails of all splices. Color-code secondary distribution circuits as shown on the plans; the ground conductor shall be green. Each accessible location of underground cable in junction boxes, pull boxes and pole bases shall have a permanent white nylon tag with black lettering, attached in a "flag" manner using a nylon tie, identifying the cabinet and conductor circuit number.

E Branch Circuit Tagouts

The contractor may at his option work on live circuits or he may disconnect and tag out circuits. Any branch circuit not disconnected and tagged out shall be considered live; restrict work force to those qualified to work on live circuits. Disconnection may be made by disconnecting branches at the overcurrent device. Make tagouts with contractor furnished manufactured electrical warning tags and endorse with the name of the contractor, the date, and the project. Clear all tagouts by the end of the workday.

F Threaded Fasteners

Liberally coat all threaded fasteners, i.e., screws, and bolts with an approved anti-seize compound. Excepting fasteners inside control cabinets, fasteners up to 1/2-inch in diameter shall be stainless steel.

Provide rust, corrosion and anti-seize protection at threaded assemblies by coating the mating surfaces with Markal (Hightemp E-Z Break), Never-Seez (marine grade), LPS 100, Lubriplate or approved equal.

G Bonding Wire

Install bonding wire in conduits for equipment grounding. Ground all equipment as required.

H Initial Failures

The contractor and the engineer shall agree on a time for test burning of completed installations, which is generally toward the end of the contract period. Replace failed lamps, along with any other non-functioning component, for no additional compensation. Only one test burn for the purpose of identifying initial failures will be required. Coordinate supply of replacement lamps with the city.

I Project Construction Staging

The construction of the new lighting system shall maintain the integrity of the existing lighting systems within and beyond the project limits at all times. Exceptions to this shall only be granted for just cause by the inspector.

J Items of the Same Classification

All items of the same classification shall be of the same manufacturer and series.

L Underground Installation

Ensure that the engineer has inspected all underground conduit and concrete base forms before backfilling any trench or pouring concrete. Any work completed without such inspection is subject to rejection as unacceptable work and shall be immediately removed and acceptably replaced or otherwise satisfactorily corrected by and at the expense of the contractor. It is the contractor's responsibility to arrange for inspections. There will not be any additional compensation to the contractor for delays and inconvenience associated with arranging and waiting for inspections.

31. Removing Vehicular Gate, Item 204.9060.S.01

A Description

This special provision describes Removing Vehicular Gate conforming to standard spec 204.

- B (Vacant)
- C (Vacant)
- **D** Measurement

The department will measure Removing Vehicular Gate in each, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBERDESCRIPTIONUNIT204.9060.S.01Removing Vehicular GateEACH

stp-204-025 (20150630)

32. Removing Sidewalk Trench Drain, Item 204.9060.S.02

A Description

This special provision describes Removing Sidewalk Trench Drain conforming to standard spec 204.

- B (Vacant)
- C (Vacant)

D Measurement

The department will measure Removing Sidewalk Trench Drain in each, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBERDESCRIPTIONUNIT204.9060.S.02Removing Sidewalk Trench DrainEACH

stp-204-025 (20150630)

33. Removing Stone Retaining Wall, Item 204.9090.S.01

A Description

This special provision describes removing Stone Retaining Wall conforming to standard spec 204.

- B (Vacant)
- C (Vacant)

D Measurement

The department will measure Removing Stone Retaining Wall in linear footage, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER DESCRIPTION UNIT 204.9090.S.01 Removing Stone Retaining Wall LF stp-204-025 (20150630)

34. Removing Metal Railing, Item 204.9090.S.02

A Description

This special provision describes removing Metal Railing conforming to standard spec 204.

- B (Vacant)
- C (Vacant)
- **D** Measurement

The department will measure Removing Metal Railing in linear footage, acceptably completed.

E Payment

Add the following to standard spec 204.5:

ITEM NUMBER DESCRIPTION UNIT 204.9090.S.02 Removing Metal Railing LF

stp-204-025 (20150630)

35. Stamping Colored Concrete, Item 405.1000.

This special provision describes stamping and coloring concrete with a color approved by the engineer prior to placement of any color imprinted concrete constructed under other contract bid items. Conform to standard spec 405 as modified in this special provision.

Replace standard spec 405.2.1.1(1) with the following:

- (1) Integrally color concrete using non-fading pigments conforming to ASTM C979.
 - For Natural Bark: use synthetic non-fading iron oxides at a loading of six percent minimum and a
 maximum loading of eight percent by weight of total cementitious material in the mix. Match the
 concrete color in reasonably close conformance with color similar to the existing colored
 concrete located along East Johnson Street between Baldwin Street and First Street in the City
 of Madison.

Replace standard spec 405.2.1.1(3) with the following:

(3) The department will accept the color based on comparison to color samples available for viewing along East Johnson Street between Baldwin Street and First Street in the City of Madison.

Replace the entire contents of standard spec 405.2.2 with the following:

- (1) Furnish Natural Bark full-depth colored concrete conforming to standard spec 405.2.1.
- (2) Use a 6-inch x 6-inch cobblestone pattern applied parallel to roadway centerline or city approved alternative.
- (3) Supply a powder antiquing form release agent. Apply form release agent according to manufacturer's instructions using manufacturer's recommended application techniques.

Replace the entire contents of standard spec 405.3.2 with the following:

- (1) Color concrete full-depth conforming to standard spec 405.3.1. Cover and protect adjacent construction and concrete from discoloration and spillage during placement and curing of colored concrete. Remove and replace discolored concrete at no cost to the department.
- (2) Uniformly apply liquid release agent onto the colored still plastic state concrete to provide clean release of imprinting tools from the concrete surface without lifting imprint or tearing concrete.

While initially finished concrete is in plastic state, accurately align and place imprinting stamps. Contractor will need to monitor the setting up of the concrete. Once the concrete has set to the point it can be stamped begin stamping. Uniformly pound or press imprint tools into concrete to produce required pattern and depth of imprint on concrete surface. Remove platform tools immediately. Hand texture and stamp edges and surfaces unable to be imprinted by stamp mats. Touch up imperfections such as broken corners, double imprints and surface cracks.

Stamp concrete consistently so that stamped concrete does not have a vertical elevation difference of ½ inch or depressions in concrete capable of causing ponding water or ice.

For concrete hand stamp edges and surfaces that are unable to be imprinted by platform tools, use texture mats and single blade hand stamps to match platform tool stamping pattern. Finish imprinting to match sample panels.

After concrete has been stamped and the sheen has left the surface of the colored concrete, seal colored concrete. Apply per manufacturer's recommendations. Apply two coats of seal. Apply second coat after first coat has dried. Do not seal over blemishes or imperfections caused by rainfall or protection materials.

stp-405-100 (20160607)

36. Abutment Construction.

Determine the method of construction, and observe the following conditions:

- 1. If a cofferdam is used, build the cofferdam of non-erodable material.
- Concrete poured under water will be allowed; pour the concrete conforming to standard spec 502.3.5.3.
 Ensure that the forms are tight to prevent leakage of concrete into the stream. Treat all displaced water by filtration, settling basin, or other means sufficient to reduce the cement content before discharging the water into the stream.
- Excavated material from the stream may be utilized in the fill slopes so long as it is covered with other suitable material to prevent it from eroding back into the stream.

stp-502-010 (20050502)

37. Precast Concrete Box Culvert, 3 FT x 6 FT, Item 504.2000.S.01.

A Description

This special provision describes furnishing and installing precast concrete box culverts of the size and length the plans show.

B Materials

Provide materials and fabricate Precast Concrete Box Culvert according to ASTM C1577, except that the concrete mixture shall contain not less than 565 pounds of Portland cement, blended cement or Portland cement plus pozzolanic admixture per cubic yard. Slab thickness, areas of reinforcement, and other details shall be as the plans show.

C Construction

Construct joint spacing and segment length per the manufacturer's specifications. Construct the box culvert segments to include the structure walls and opening for the bid item "Inlet Cover Madison Special" casting as shown on the plans. The structure walls and opening for "Inlet Cover Madison Special" is incidental to the Precast Concrete Box Culvert, 3-FT x 6-FT.

Construct the box culvert at the skew or angle as shown on the plans, any special bends shall be precast and are incidental to the Precast Concrete Box Culvert, 3-FT x 6-FT.

Construct a concrete collar to connect the Precast Concrete Box Culvert, 3-FT x 6-FT to the RCP storm sewer as shown on the plans. Construct a 9" thick concrete wall formed on the inside of the box culvert and doweled into the wall, roof, and floor of the box culvert. Concrete collar for connecting Precast Concrete Box Culvert, 3-FT x 6-FT to RCP pipe is incidental to the Precast Concrete Box Culvert, 3-FT x 6-FT.

Other concrete collars as shown on the plan connecting circular pipes are paid for by "Concrete Collars for Pipe"

D Measurement

The department will measure Precast Concrete Box Culvert, 3 FT x 6 FT, completed according to the contract and accepted, in length by the linear foot in place. The box culvert will be measured on the centerline of the box along the flow line.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 504.2000.S.01 Precast Concrete Box Culvert, 3 FT x 6 FT LF

Payment is full compensation for furnishing, hauling and placing the box, including joint ties, forms, concrete, dowel bars, mastic, disposal of excess materials, and any other incidentals necessary to complete the work.

stp-504-015 (20160607)

38. Prefabricated Steel Truss Pedestrian Bridge B-13-864 LRFD, Item 506.8006.S.01.

A Description

This special provision describes providing a fully engineered, fabricated steel truss pedestrian bridge structure, including bearings the plans show. Conforming to standard spec part 5 as modified in this special provision. Regard these specifications as minimum standards for design and construction.

B Materials

B.1 Approved Manufacturers

The bridge shall be designed and manufactured by an approved designer and supplier selected from the department's approved products list.

To be eligible for this project, pre-fabricated bridges from other manufacturers must be pre-approved before the bid opening date. Applications for pre-approval may be submitted at any time. Prepare the application according to the department requirements. If needed, obtain information and assistance with the pre-approval process from the Structures Maintenance Section in the Bureau of Structures, by sending an email to the following address: DOTDLStructuresFabrication@dot.wi.gov

B.2 Design Requirements

Structural design of the pedestrian bridge shall be by a professional engineer registered in the State of Wisconsin.

Design the bridge according to the most recent edition of the AASHTO LRFD Bridge Design Specifications, all current interims, and the AASHTO LRFD Guide Specifications for Design of Pedestrian Bridges, except as modified herein.

Design welded tubular connections according to the Structural Welding Code-Steel ANSI/AWS D1.1. The fracture critical requirements of ANSI/AWS D1.5 do not apply, and Charpy V-notch impact testing will not be required. Loading shall be as stated in Section 3 of the AASHTO LRFD Guide Specifications for Design of Pedestrian Bridges. The bridge shall be a half-through truss with profile as the plans show with one diagonal per panel. Chords, diagonals, verticals, bracing, and floor beams may be tube steel. Tube steel shall have a minimum thickness of 1/4 inch, angles shall have a minimum thickness of 1/4-inch, C-shaped side dams shall have a minimum web thickness of 3/16-inch, and W-shapes shall have a minimum web thickness of 1/4-inch if painted or coated and 5/16-inch if not painted or coated. All other steel shapes shall have a minimum thickness of 5/16 inch unless contract plans allow a minimum thickness of less than 5/16 inch for other steel shapes. Field splices shall be bolted with ASTM F3125 Grade A325 high `strength bolts according to the "Specifications for Structural Joints Using High Strength Bolts". Type 3 bolts are required for weathering steel. For top and bottom chord field splices, splice plates are required on both the inside and outside surface of all four sides of the spliced tubing so that each bolt will be acting in double shear. Nuts may be welded to the splice plates to hold them in place during installation. When the collection of water inside a structural tube is a possibility, either during construction or during service, provide the tube with a drain hole at its lowest point.

If the profile grade line is on a crest vertical curve, camber the bridge to match the profile grade line the plans show plus the calculated dead load deflection. For a single span bridge, if the profile grade line has a constant slope (no vertical curve), camber the bridge to offset the calculated dead load deflection plus an amount equal to 1% of the bridge length. For a bridge with two or more spans, if the profile grade line has a constant slope (no vertical curve), camber the bridge to offset the calculated dead load deflection only. Concrete bridge decks shall be continuous over the floor beams. Concrete bridge decks may be supported by stay in place corrugated galvanized steel deck forms unless the contract plans specify removable deck forms only. The maximum depth of the stay in place corrugated steel deck forms shall not be considered for the design of the concrete deck. Design of the stay in place corrugated steel deck forms shall be included with the truss design. The minimum slab thickness shall be 5.5 inches for removable deck forms and 6 inches for stay in place corrugated steel deck forms. For stay in place corrugated steel deck forms the 6 inch minimum is measured from the bottom of the deck form. Design the longitudinal reinforcing steel in the slab based on a wheel load located 1 foot from the face of the curb or toe plate, or a pedestrian live load of 90 psf, whichever controls.

Concrete strength (f_c) shall be 4,000 psi and F_y of bar steel shall be 60,000 psi. A concrete mix with a unit weight of 120 pcf or 150 pcf may be used at the option of the manufacturer/contractor. Use a design dead load of 120 pcf or 150 pcf to match the concrete mix selected. Use load factors of 1.25 for dead load and 1.75 for live load for the design of the concrete slab and floor beams. Minimum concrete cover shall be 2 inches for top reinforcement and 1 inch for bottom reinforcement. Design the bridge for

expansion and contraction with a temperature range of -30° F to 120° F. Utilize Teflon slip pads or other approved material on the sliding surface of the expansion bearing assembly.

Install protective screening, when required, as the plans show. Use protective screening that is 9 gauge chain link fence with 2 inch mesh, coated as the plans show.

B.3 Plan Requirements and Submittals

Submit shop drawings and calculations to the engineer conforming to standard spec <u>105.2</u> with electronic submittal to the fabrication library under standard spec <u>105.2.2</u>. Department review does not relieve the contractor from responsibility for errors or omissions on shop drawings.

Make the submittal no later than 12 weeks after date of notice of contract approval. Allow the following time period in the construction schedule: 20 calendar days after the first receipt of plans by the StructuresDesign Section for a complete initial review of the design and plans submittal, and an additional 20 calendar days for any necessary revisions and/or corrections.

In the submittal, include the following:

- 1. Basic design criteria shown on the design plans.
- Complete detailed drawings of all structural steel connections, sizes of members, span lengths
 between bearing points, skews, walkway widths, height of handrails and safety rails, bearing
 assembly details, anchor bolt locations, concrete deck reinforcement, design data, materials
 data, and dead and live load bearing reactions.
- 3. Engineer's certification. The plans shall be sealed, signed, and dated by a professional engineer registered in the State of Wisconsin.
- 4. One set of design calculations with independent checks.

The department will return shop drawings from this submittal, and any subsequent submittals, to the fabrication library, either indicating acceptance or marked with required revisions and/or corrections.

B.4 Weld Testing

An independent agency shall perform nondestructive weld testing; the manufacturer shall pay for this testing. All welds are to be visually inspected except as noted below.

Ten percent of all fillet welds shall be magnetic particle tested.

All full penetration welds of chords shall be ultrasonically or radiographically tested.

Bottom chord welded tube splices for tube thicknesses less than 3/8 inches thick shall be radiographically tested or covered with fillet welded splice plates with non-intersecting welds which develop 75% of the spliced member strength.

Submit electronically a written testing report upon completion.

C Construction

C.1 Delivery and Erection

Deliver the bridge by truck to the location that is nearest to the site and accessible by road. The contractor is responsible for unloading the bridge from the trucks at the time of arrival.

The manufacturer shall notify the contractor in advance of the expected arrival time. Information regarding delays after the trucks depart the plant such as inclement weather, delays in permits, rerouting by public agencies, or other circumstances shall be passed on to the contractor as soon as possible.

The manufacturer shall provide an erection procedure to the contractor and shall advise the contractor of the actual lifting weights, attachment points, and all other information needed to install the bridge. Unloading, splicing, bolting, and providing proper lifting equipment as well as all tools, equipment, labor, and miscellaneous items required to complete the work is the responsibility of the contractor. The procedure for bolting field splices shall be given to the contractor by the manufacturer.

C.2 Finishes

When unpainted steel is specified on the plans, all fabrications shall be produced from high strength, low alloy, atmospheric corrosion resistant ASTM A847 cold-formed welded square and rectangular tubing, ASTM A606 sheet, and/or ASTM A588, ASTM A242, or ASTM A709 Grade 50W plate and structural steel shapes (F_v=50,000 psi) with a minimum corrosion index of 5.8 per ASTM G101.

Blast-clean all exposed surfaces of weathering steel according to Steel Structures Painting Council Surface Preparation Specifications No. 7 Brush-Off Blast Cleaning (SSPC-SP7), latest edition. Exposed surfaces of weathering steel shall be defined as those surfaces seen from the deck and from outside the structure. Stringers, floor beams, lower brace diagonals and the inside face of the truss below the deck, and bottom of the bottom chord do not need to be blasted.

When the plans specify painted steel, paint the bridge with a three-coat epoxy system from the department's approved products list as specified in standard spec 517.

D Measurement

The department will measure Prefabricated Steel Truss Pedestrian Bridge B-13-864 LRFD as a single unit of work for each structure bridge, 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

506.8006.S.01

Prefabricated Steel Truss Pedestrian Bridge B-13-864 LRFD

EACH

Payment is full compensation for designing, manufacturing, transporting and erecting the pedestrian bridge, furnishing bearing plates, pads, bolts, anchors bolts, concrete masonry, Concrete QMP, bar steel reinforcement, and grout. The department will pay separately for painting under the Painting Epoxy System Steel Truss (structure) bid item.

stp-506-085 (20210708)

39. Sawing Pavement Deck Preparation Areas, Item 509.0310.S.

A Description

This special provision describes sawing around deteriorated areas requiring deck repairs under the Preparation Decks bid items on decks receiving asphalt or polymer overlays and for deck repairs that will not receive an overlay.

B (Vacant)

C Construction

The department will sound and mark areas of deteriorated concrete that require deck preparation. The engineer may identify and mark additional areas as the work is being performed.

Wet cut a minimum of 1 inch deep and at least 2 inches outside of the marked areas. Bound each marked area by providing cuts aligned parallel and perpendicular to the deck centerline.

Remove sawing sludge after completing each area. Do not allow sludge or resulting residue to enter a live lane of traffic, storm sewer, stream, lake, reservoir, marsh, or wetland. Dispose of sludge at an acceptable material disposal site located off the project limits or, if the engineer allows, within the project limits.

D Measurement

The department will measure Sawing Pavement Deck Preparation Areas by the linear foot, acceptably completed, measured as the total linear feet of bounding cuts.

The department will not measure for payment over-cuts or cuts made beyond what is required to bound engineer-marked deterioration limits.

E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

509.0310.S

Sawing Pavement Deck Preparation Areas

LF

Payment is full compensation for making all saw cuts; and for debris disposal.

stp-509-070 (20180628)

40. Concrete Masonry Deck Repair, Item 509.2100.S.

A Description

This special provision describes providing concrete masonry on the sawed deck preparation areas of the concrete bridge deck and in full depth deck, curb, and joint repair areas. Conform to standard spec 502 and standard spec 509.

B Materials

B.1 Neat Cement

Furnish a neat cement bonding grout. Mix the neat cement in a water-cement ratio approximately equal to 5 gallons of water per 94 pounds of cement.

B.2 Concrete

Furnish grade C or E concrete conforming to standard spec 501 for deck preparation, full-depth deck repair, curb repair and joint repair areas except as follows:

- 1. The contractor may increase slump of grade E concrete to 3 inches.
- 2. The contractor may use ready-mixed concrete.

Provide QMP for class II ancillary concrete as specified in standard spec 716.

C Construction

C.1 Neat Cement

Immediately before placing the concrete deck patching, coat the prepared surfaces with a neat cement mixture. Ensure the prepared concrete surfaces are moist without any standing water before coating with the neat cement mixture. Brush the neat cement mixture over the prepared concrete surfaces to ensure that all parts receive an even coating, and do not allow excess neat cement to collect in pockets. Apply the neat cement at a rate that ensures the cement does not dry out before being covered with the new concrete.

C.2 Placing Concrete

Place concrete conforming to standard spec 509. As determined by the engineer, consolidate smaller areas by internal vibration, strike them off, and finish the areas with hand floats to produce plane surfaces that conform to the grade and elevation of the adjoining surfaces. Give all deck patching areas a final hand float finish.

C.3 Curing Concrete

Cure the concrete masonry deck patching conforming to standard spec 502.2.6(1).

D Measurement

The department will measure Concrete Masonry Deck Repair by the cubic yard, acceptably completed.

The department will measure concrete used in deck preparation areas and in full depth deck, curb, and joint repair as part of the Concrete Masonry Deck Repair bid item.

The department will not measure wasted concrete.

E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

509.2100.S

Concrete Masonry Deck Repair

CY

Payment is full compensation for furnishing, hauling, preparing, placing, finishing, curing, and protecting all materials.

stp-509-060 (20210708)

41. Polymer Overlay, Item 509.5100.S.

A Description

This special provision describes providing two layers of a two-component polymer overlay system to the bridge decks the plans show.

B Materials

B.1 General

Furnish materials specifically designed for use over concrete bridge decks. Furnish polymer liquid binders from the department's approved product list.

B.2 Polymer Resin

Furnish a polymer resin base and hardener composed of two-component, 100 percent solids, 100 percent reactive, thermosetting compound with the following properties:

Property	Requirements	Test Method		
Gel Time ^[1]	15 - 45 minutes @ 73° to 75° F	ASTM C881		
Viscosity ^[1]	7 - 70 poises	ASTM D2393, Brookfield RVT, Spindle No. 3, 20 rpm		
Shore D Hardness ^[2]	60-75	ASTM D2240		
Absorption ^[2]	1% maximum at 24 hr	ASTM D570		
Tensile Elongation ^[2]	30% - 70% @ 7 days	ASTM D638		
Tensile Strength ^[2]	2000 to 5000 psi @ 7 days	ASTM D638		
Chloride Permeability ^[2]	<100 coulombs @ 28 days	AASHTO T277		

^[1] Uncured, mixed polymer binder

Ensure that the polymer resin when mixed with aggregate has the following properties:

Property	Requirement ^[1]	Test Method
Minimum Compressive Strength	1,000 psi @ 8 hrs 5,000 psi @ 24 hrs	ASTM C579 Method B, Modified ^[2]
Thermal Compatibility	No Delaminations	ASTM C884
Minimum Pull-off Strength	250 psi @ 24 hrs	ASTM C1583

^[1] Based on samples cured or aged and tested at 75°F

B.3 Aggregates

Furnish natural or synthetic aggregate that is non-polishing; clean; free of surface moisture; fractured or angular in shape; free from silt, clay, asphalt, or other organic materials; and conform to the following:

Aggregate Properties

Property	Requirement	Test Method	
Moisture Content ^[1]	Moisture Content ^[1] 1/2 of the measured aggregate absorption, %		
Hardness	≥6.5	Mohs Scale	
Fractured Faces	100% with at least 1 fractured face & 80% with at least 2 fractured faces of material retained on No.16	ASTM D5821	
Absorption	<u>≤</u> 1%	ASTM C128	

^[1] Sampled and tested by the department before placement.

^[2] Cured, mixed polymer binder

Plastic inserts that will provide 2-inch by 2-inch cubes shall be placed in the oversized brass molds.

Gradation

Sieve Size	% Passing by Weight
No. 4	100
No. 8	30 – 75
No. 16	0 – 5
No. 30	0 – 1

B.4 Approval of Bridge Deck Polymer Overlay System

A minimum of 20 working days before application, submit product data sheets and specifications from the manufacturer, and a certified report of test or analysis from an independent laboratory to the engineer for approval. The department will sample and test the aggregates for gradation and moisture content before placement. If requested, supply the department with samples of the polymer for the purpose of acceptance testing.

B.4.1 Product Data Sheets and Specifications

Product data sheets and specifications from the manufacture consists of literature from the manufacturer showing general instructions, application recommendations/methods, product properties, general instructions, or any other applicable information.

B.4.2 Certified Report of Test or Analysis

Conform to the following:

<u>Polymer Binder:</u> Submit a certified report of test or analysis from an independent laboratory dated less than 3 years before the date of the project letting showing the polymer binder meets the requirements of section B.2.

<u>Aggregates:</u> Submit a certified report of test or analysis from an independent laboratory dated less than 6 months before the date of the project letting showing the aggregates meet the requirements of section B.3.

C Construction

C.1 General

Ensure that the overlay system is 1/4 inch thick or thicker.

Conform to the following:

<u>Field Review:</u> Conduct a field review of the existing deck to identify any possible surface preparation and material compatibility issues.

<u>Pre-Installation Meeting</u>: Conduct a pre-installation meeting with the manufacturer's representative and the engineer before construction. Discuss the field review findings, verification testing of the surface preparation and establish procedures for maintaining optimum working conditions and coordination of work. Furnish the engineer a copy of the recommended procedures and apply the overlay system according to the manufacturer's instructions. Supply for the engineer's use for the duration of the project, a Concrete Surface Profile (CSP) chip set of 10 from the International Concrete Repair Institute (ICRI).

<u>Manufacturer's Representative:</u> An experienced manufacturer's representative familiar with the overlay system installation procedures shall be present at all times during surface preparation and overlay placement to provide quality assurance that the work is being performed properly. This requirement may be reduced at the engineer's discretion.

<u>Material Storage:</u> Store and handle materials according to the manufacturer's recommendations. Store resin materials in their original containers in a dry area. Store all aggregates in a dry environment and protect aggregates from contaminants on the job site.

C.2 Deck Preparation

C.2.1 Deck Repair

Remove all asphaltic patches and unsound or disintegrated areas of the concrete decks as the plans show, or as the engineer directs. Work performed to remove and repair the concrete deck will be paid for under other items.

Use deck patching products that are compatible with the overlay system. Patching materials with magnesium phosphate shall not be used. Place patches after surface is prepared via shot blasting and cleaning as described in Section C.2.2 of this specification. Portland cement concrete patches shall be used for joint repairs and full depth deck repairs with a plan area larger than 4 sf, unless approved otherwise by the Structures Design Section. If rapid-set concrete is used, place patches per the manufacturer's recommendation. If Portland cement concrete is used, place patches per standard spec 509.3.9.1.

Deck patching shall be filled and properly finished prior to overlay placement. Do not place overlay less than 1 hour, or per the manufacturer's recommendation, after placing rapid-set concrete patches in the repair areas. Do not place overlay less than 28 days after placing Portland cement concrete patches in the repair areas.

C.2.2 Surface Preparation

Determine an acceptable shotblasting machine operation (size of shot, flow of shot, forward speed, and/or number of passes) that provides a surface profile meeting CSP 5 (medium-heavy shotblast) according to the ICRI Technical Guideline No. 310.2. If the engineer requires additional verification of the surface preparation, test the tensile bond strength according to ASTM C1593. The surface preparation will be considered acceptable if the tensile bond strength is greater than or equal to 250 psi or the failure area at a depth of 1/4 inches or more is greater than 50 percent of the test area. Continue adjustment of the shotblasting machine and necessary testing until the surface is acceptable to the engineer or a passing test result is obtained.

Prepare the entire deck using the final accepted adjustments to the shotblasting machine as determined above. Thoroughly blast clean with hand-held equipment any areas inaccessible by the shotblasting equipment. Do not perform surface preparation more than 24 hours before the application of the overlay system.

Protect drains, expansion joints, access hatches, or other appurtenances on the deck from damage by the shot and sand blasting operations and from materials adhering and entering. Tape or form all construction joints to provide a clean straight edge.

Before shot blasting, remove pavement markings within the treatment area using an approved mechanical or blasting method.

Prepare the vertical concrete surfaces adjacent to the deck a minimum of 2" above the overlay according to SSPC-SP 13 (free of contaminants, dust, and loose concrete) by sand blasting, using wire wheels, or other approved method.

Just before overlay placement, clean all dust, debris, and concrete fines from the prepared surfaces including the vertical surfaces with compressed air. When using compressed air, the air stream must be free of oil. Any grease, oil, or other foreign matter that rests on or has absorbed into the concrete shall be removed completely. If prepared surfaces (including the first layer of the polymer overlay) are exposed to rain or dew, lightly sandblast (brush/breeze blast) the exposed surfaces.

The engineer may consider alternate surface preparation methods per the overlay system manufacture's recommendations. The engineer will approve the final surface profile and deck cleanliness before the contractor placing the polymer overlay.

C.2.3 Transitional Area

If the plans show, create a transitional area approaching transverse expansion joints and ends of the deck using an approved mechanical or blasting method. Remove 1/4 inch to 5/16 inch of concrete adjacent to the joint or end of deck and taper a distance of 3 feet.

If the plans show, create a transitional area on the approach pavement. Prep and place the first lift 3 feet beyond the end of the deck the same width as the deck. Prep and place the second lift 6 feet beyond the end of the deck the same width as the deck.

C.3 Overlay Application

Perform the handling and mixing of the polymer resin and hardening agent in a safe manner to achieve the desired results according to the manufacturer's instructions. Do not apply the overlay system if any of the following exists:

- 1. Ambient air temperature is below 50 F or above 100 F.
- 2. Deck temperature is below 50 F.
- 3. Moisture content in the deck exceeds 4.5 percent when measured by an electronic moisture meter or shows visible moisture after 2 hours when measured according to ASTM D4263.
- 4. Rain is forecasted during the minimum curing periods listed under C.5.
- 5. Materials component temperatures below 65 F or above 99 F.
- 6. Concrete deck age is less than 28 days.
- 7. The deck temperature exceeds 100 F.
- 8. If the gel time is 10 minutes or less at the predicted high air temperature for the day.

After the deck has been shotblasted or during the overlay curing period, only necessary surface preparation and overlay application equipment will be allowed on the deck. Provide appropriate protective measures to prevent contamination from equipment allowed on the deck during preparation and application operations. Begin overlay placement as soon as possible after surface preparation operations.

The polymer overlay shall consist of a two-course application of polymer and aggregate. Each of the two courses shall consist of a layer of polymer covered with a layer of aggregate in sufficient quantity to completely cover the polymer. Apply the polymer and aggregate according to the manufacturer's requirements. Apply the overlay using equipment designed for this purpose. The application machine shall feature positive displacement volumetric metering and be capable of storing and mixing the polymer resins at the proper mix ratio. Disperse the aggregate using a method that provides a uniform, consistent coverage of aggregate and minimizes aggregate rolling or bouncing into final position. First course applications that do not receive enough aggregate before the polymer gels shall be removed and replaced. A second course applied with insufficient aggregate may be left in place but will require additional applications before opening to traffic.

After completion of each course, cure the overlay according to the manufacturer's instructions. Follow the minimum cure times listed under C.5 or as prescribed by the manufacturer. Remove the excess aggregate from the surface treatment by sweeping, blowing, or vacuuming without tearing or damaging the surface; the material may be re-used if approved by the engineer and manufacturer. Apply all courses of the overlay system before opening the area to traffic. Do not allow equipment or traffic on the treated area until directed by the engineer.

After the first layer of coating has cured to the point where the aggregate cannot be pulled out, apply the second layer. Before applying the second layer, broom and blow off the first layer with compressed air to remove all loose excess aggregate.

Before opening to traffic, clean expansion joints and joint seals of all debris and polymer. A minimum of 3 days following opening to traffic, remove loosened aggregates from the deck, expansion joints, and approach pavement.

C.4 Application Rates

Apply the polymer overlay in two separate courses according to the manufacturer's instructions, but not less than the following rate of application.

Course	Minimum Polymer Rate ^[1] (GAL/100 SF)	Aggregate ^[2] (LBS/SY)		
1	2.5	10+		
2	5.0	14+		

^[1] The minimum total applications rate is 7.5 GAL/100 SF.

^[2] Application of aggregate shall be of sufficient quantity to completely cover the polymer.

C.5 Minimum Curing Periods

As a minimum, cure the coating as follows:

	Average temperature of deck, polymer and aggregate components in degrees F							
Course	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-99
1	6 hrs.	5 hrs.	4 hrs.	3 hrs.	2.5 hrs	2 hrs	1.5 hrs.	1 hr.
2	8 hrs.	6.5 hrs.	6.5 hrs.	5 hrs.	4 hrs.	3 hrs.	3 hrs.	3 hrs.

If faster cure times are desired and achievable, submit to the engineer a certified test report from an independent laboratory showing the material is able to reach a compressive strength of 1000 psi as tested per ASTM C 579 Method B within the temperature ranges and cure times for which the product is proposed to be placed. Establish ambient air, material, and substrate temperatures from the manufacturer for field applications. Field applications will not be allowed below the documented temperatures.

C.6 Repair of Polymer Overlay

Repair all areas of unbonded, uncured, or damaged polymer overlay for no additional compensation. Submit repair procedures from the manufacturer to the engineer for approval. Absent a manufacturer's repair procedures and with the approval of the engineer, complete repairs according to the following: Saw cut the limits of the area to the top of the concrete; remove the overlay by scarifying, grinding, or other approved methods; shot blast or sand blast and air blast the concrete before placement of polymer overlay; and place the polymer overlay according to section C.3.

D Measurement

The department will measure Polymer Overlay by the square yard, acceptably completed.

E Payment

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

509.5100.S Polymer Overlay

SY

Payment is full compensation for preparing the surface; for tensile bond testing; for creating the transitional area; for providing the overlay; for cleanup; and for sweeping/vacuuming and disposing of excess materials.

The department will pay separately for deck repairs.

stp-509-030 (20200629)

42. Removing Polymer Overlay B-13-254, Item 509.9015.S.

A Description

This special provision describes removing the polymer overlay. Perform work conforming to standard spec 204.

B (Vacant)

C Construction

Remove the overlay by scraping, grinding, milling, or other approved method without damaging the underlying concrete. Submit removal procedures to the engineer for approval before beginning. Do not remove more than 1/4"of the existing concrete surface. Leave a uniform textured finish over the entire concrete surface.

D Measurement

The department will measure Removing Polymer Overlay B-13-254 by the square yard, acceptably completed.

E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT
509.9015.S.01

Removing Polymer Overlay B-13-254

SY

Payment for is full compensation for removing the polymer; and for properly disposing of all materials. stp-509-015 (20210113)

43. Concrete Staining R-13-336, Item 517.1010.S.01.

A Description

This special provision describes providing a two coat concrete stain on the exposed concrete surfaces of structures as the plans show.

B Materials

B.1 Mortar

Use mortar for sack rubbing the concrete surfaces as given in standard spec 502.3.7.5 or use one of the following products:

Preblended, Packaged Type II Cement: Tri-Mix by TK Products

Thoroseal Pearl Gray by Thoro Products

The mortar shall contain one of the following acrylic bonding admixtures mixed and applied according to manufacturer's recommendations:

Acrylic Bonding Admixture: TK-225 by TK Products

Achro 60 by Thoro Products
Achro Set by Master Builders

B.2 Concrete Stain

Use concrete stain manufactured for use on exterior concrete surfaces, consisting of a base coat and a pigmented sealer finish coat. Use the following products, or equal as approved by the department, as part of the two coat finish system:

- Tri-Sheen Concrete Surfacer, Smooth by TK Products
- Tri-Sheen Acrylic by TK Products
- TK-1450 Natural Look Urethane Anti-Graffiti Primers by TK Products
- Safe-Cure & Seal EPX by Chem Masters

H&C Concrete Stain Solid Color Water Based by Sherwin-Williams in the color as specified below:

Wall Color: Base Coat, Interactive Cream Base with Highlights

Highlights: Federal #33446, #20122 & Custom Match Gold Formula:

Eide Gold Gold CCE Colorant:

CCE Colorant	OZ 64	32 128
Y3-Deep Gold	6	11
B1-Black	-	9
D 1-Diack	-	1
R4-New Red	-	9
R2-Maroon	-	- 6
RZ-IVIAIOUII	- -	1

One Gallon HC SPU Deep

Coping Color: Federal #26622

The finished color shall match the retaining wall color in close conformance with the color similar to the existing retaining wall staining along Buckeye Road near Morningside Drive in the City of Madison.

C Construction

C.1 General

Furnish, prepare, apply, cure, and store all materials according to the product manufacturer's specifications for the type and condition of application required.

Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, before staining.

C.2 Preparation of Concrete Surfaces

Provide a sack rubbed finish as specified in standard spec 502.3.7.5, using mortar as indicated above on concrete surfaces with open voids or honeycombing.

Following the sack rubbing, clean all concrete surfaces that are to be coated to ensure that the surface is free of all laitance, dirt, dust, grease, efflorescence, and any foreign material and that the surface will accept the coating material according to product requirements. As a minimum, clean the surface using a 3000-psi water blast. Hold the nozzle of the water blaster approximately 6 inches from the concrete surface and move it continuously in a sweeping motion. Give special attention to smooth concrete surfaces to produce an acceptable surface texture. Correct any surface problems resulting from the surface preparation methods. Grit blasting of the concrete surface is not allowed.

C.3 Staining Concrete Surfaces

Apply the concrete stain according to the manufacturer's recommendations.

Apply the concrete stain when the temperature of the concrete surface is 45° F or higher, or as given by the manufacturer.

The color of the stain shall be as described in B2 of this specification. Tint the base coat to match the finish coat; the two coats shall be compatible with each other.

Do not begin staining the structure until earthwork operations are completed to a point where this work can begin without receiving damage. Where this work is adjacent to exposed soil or pavement areas, provide temporary covering protection from overspray or splatter.

C.4 Test Areas

Before applying stain to the structure, apply the stain to sample panels measuring a minimum of 48 inches x 48 inches and constructed to demonstrate workmanship in the use of the form liner specified on the structure if applicable. Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, before staining. Prepare the concrete surfaces of the sample panels and apply stain using the same materials and in the same manner as proposed for the structure, including staining of the joints between the stones produced by the form liner if applicable. Do not apply stain to the structure until the City of Madison and the department approves the test panels.

C.5 Surfaces to be Coated.

Apply concrete stain to the surfaces according to the plan.

D Measurement

The department will measure Concrete Staining R-13-336 in area by the square foot of surface, acceptably prepared and stained.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT 517.1010.S.01 Concrete Staining R-13-336 SF

Payment is full compensation for furnishing and applying the two coat system; for preparing the concrete surface; and for preparing the sample panels.

stp-517-110

44. Inlet Covers Type H; Type H-S.

Perform this work according to standard spec 611 and as hereinafter provided.

Provide inlet covers with the design as detailed in the plans.

45. Manhole Covers Type J-Special.

Perform this work according to standard spec 611 and as hereinafter provided.

Provide castings according to standard spec 611 and Article 507 of the City Standard Specifications and as shown on the plans. Provide frames, grates, and lids with logo per City Standard Specifications Standard Detail Drawing 5.7.16.

46. Adjusting Manhole Covers.

This special provision describes adjusting manhole covers conforming to standard spec 611 as modified in this special provision.

Adjust manhole covers located in pavement areas in two separate operations. Initially, 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. During the second phase, remove the asphaltic pavement mixture surrounding the manhole plus the temporary cover plate, and set the manhole cover to final grade. The department will measure and pay for the items of asphaltic pavement mixture, temporary cover plate, milling, and paving separately.

Revise standard spec 611.3.7 by deleting the last paragraph.

Set the manhole frames so that they comply with the surface requirements of standard spec 450.3.2.9. At the completion of the paving, a 6-foot straightedge shall be placed over the centerline of each manhole frame parallel to the direction of traffic. A measurement shall be made at each side of the frame. The two measurements shall be averaged. If this average is greater than 5/8 inches, reset the manhole frame to the correct plane and elevation. If this average is 5/8 inches or less but greater than

3/8 inches, the manhole frame shall be allowed to remain in place but shall be paid for at 50 percent of the contract unit price.

If the manhole frame is higher than the adjacent pavement, the two measurements shall be made at each end of the straightedge. These two measurements shall be averaged. The same criteria for acceptance and payment as above, shall apply.

stp-611-005 (20030820)

47. 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)

48. Pipe Grates, Item 611.9800.S.

A Description

This special provision describes providing pipe grates on the ends of pipes.

B Materials

Furnish steel conforming to the requirements of standard spec 506.2.2.1. Furnish steel pipe conforming to the requirements of standard spec 506.2.3.6.

Furnish pipe grates galvanized according to ASTM A123.

Furnish angles and brackets galvanized according to ASTM A123.

Furnish required hardware galvanized according to ASTM A153.

C Construction

Repair pipes, rods, angles and brackets on which the galvanized coating has been damaged according to the requirements of AASHTO M36M.

D Measurement

The department will measure Pipe Grates in units of work, where one unit is one grate, completed 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 611.9800.S Pipe Grates EACH

Payment is full compensation for furnishing and installing all materials; and for drilling and connecting grates to pipes.

stp-611-010 (20030820)

49. Insulation Board Polystyrene, 2-Inch, Item 612.0902.S.01

A Description

This special provision describes furnishing and placing polystyrene insulation board as the plans show.

B Materials

Provide polystyrene insulation board that conforms to the requirements for Extruded Insulation Board, AASHTO Designation M230 as modified in this special provision.

Delete flammability requirement.

B.1 Certification

Before installation, obtain from the manufacturer a certification indicating compliance and furnish it to the engineer.

C (Vacant)

D Measurement

The department will measure Insulation Board Polystyrene (size) by area in square yards of work, completed 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
612.0902.S.01

Insulation Board Polystyrene 2-Inch

SY

Payment is full compensation for all excavation; and for furnishing and placing the insulation board. stp-612-005 (20030820)

50. Fence Safety, Item 616.0700.S.

A Description

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

B Materials

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

Furnish fence fabric meeting the following requirements.

Color: International orange (UV stabilized)

Roll Height: 4 feet

Mesh Opening: 1 inch min to 3 inch max

Resin/Construction: High density polyethylene mesh

Tensile Yield: Avg. 2000 lb per 4 ft. width (ASTM D638)
Ultimate Tensile Strength: Avg. 3000 lb per 4 ft. width (ASTM D638)

Elongation at Break (%): Greater than 100% (ASTM D638)

Chemical Resistance: Inert to most chemicals and acids

C Construction

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

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

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

D Measurement

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

E Payment

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

616.0700.S Fence Safety LF

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

stp-616-030 (20160607)

51. Flexible Tubular Markers.

Supplement standard spec 643.3.2 to include the following:

When fastening flexible tubular marker bases to new pavement or existing pavement to remain, attach the base with an engineer-approved adhesive.

52. Install Conduit Into Existing Item, Item 652.0700.S.01

A Description

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

B Materials

Use Conduit Special 3-Inch, as provided and paid for under other items in this contract. Furnish backfill material, topsoil, fertilizer, seed, and mulch conforming to the the standard spec.

C Construction

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

D Measurement

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

E Payment

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

ITEM NUMBERDESCRIPTIONUNIT652.0700.S.01Install Conduit Into Existing ItemEACH

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

stp-652-070 (20100709)

53. Electrical Service Meter Breaker Pedestal (Location).

Perform this work according to standard spec 656 and as hereinafter provided.

Contact City of Madison Building Inspection at, (608) 266-6503 a minimum of two working days in advance to coordinate inspection of each Electrical Service Meter Breaker Pedestal.

54. Crack and Damage Survey, Item 999.1500.S.

A Description

This special provision describes conducting a crack and damage survey of the residences and business located at 234 Oakridge 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 complete lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNIT999.1500.SCrack and Damage SurveyLS

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

stp-999-010 (20170615)

55. Abandon Sanitary Sewer-Slurry, Item SPV.0035.01.

A Description

This work consists of abandoning sanitary sewer pipe with slurry as shown in the plans and as hereinafter provided.

B Materials

Provide slurry conforming to Type B Slurry Mix as specified in Article 301.9 of the City Standard Specifications.

C Construction

Abandoning sewer pipe with slurry includes plugging one end of the pipe paid separately under the bid item Abandon Sanitary Sewer–Pipe Plug, and requires the entire pipe be filled with slurry. Vent holes may be required by the engineer to verify there are no voids left in the pipe. Saw cutting and removal of the existing pipe at the limits of abandonment is included in this item. Abandon sewer pipe by plugging the end(s) of the pipe. Maintain service in the existing sewers until the replacement sewers or appropriate bypasses approved by the engineer have been installed, at such time bulkheads or plugs may be placed. Contact and coordinate with other utilities so that they may plug their own facilities.

D Measurement

The department will measure Abandoning Sanitary Sewer with Slurry by the cubic yard, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0035.01Abandon Sanitary Sewer-SlurryCY

Payment for all work in abandoning sanitary sewer with slurry as specified herein.

56. Root Pruning Trees, Item SPV.0060.01.

A Description

This special provision describes pruning roots of existing terrace trees by hand or using a mechanical root cutting machine to allow for excavation; storm sewer, sanitary sewer or water main installation; and paving and curb and gutter operations.

B (Vacant)

C Construction

Prior to any root cutting activities, contact Brad Hofmann, City of Madison Forestry at 608-220-6796, 3 days prior to approve operations at specified locations while following 107.13 Tree Protection Specifications.

Preserve existing terrace or median trees not shown as being removed on the plans. Prune roots of existing terrace or median trees by hand or using a mechanical root cutting machine to allow for adjacent construction operations. Prune roots along the roadway side of the tree from drip edge to drip edge of the tree.

Cleanly cut roots by hand or by using a sharp clean carbide tipped rotary saw blade. If using a saw, disinfect the blade between cuts to avoid spreading disease. All root cuts shall be made smooth and clean to facilitate root regeneration. Tearing or ripping of roots is not acceptable. Removal of roots using a backhoe or endloader without proper root pruning is not acceptable.

Cover exposed tree roots with mulch and keep moist until backfilling is completed.

Backfilling of the area after removal of the roots shall be performed by the contractor as part of this item according to the pertinent provisions of standard spec 207. Backfilling shall be done by use of hand implements within the dripline of terrace or median trees.

Dispose of tree roots according to standard spec 201. Burning or burying of roots will not be permitted.

Do not conduct root pruning during bud break, shoot growth, or environmentally stressful times such as extreme drought or heat conditions.

D Measurement

The department will measure Root Pruning Trees as each individual root pruning trees, acceptably completed.

E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

SPV.0060.01

Root Pruning Trees

EACH

Payment is full compensation for all pruning, cutting, covering exposed roots with mulch, and backfilling.

57. Pruning Tree, Item SPV.0060.02.

A Description

This special provision describes pruning existing trees as needed to perform the work under this contract without causing damage to the existing trees. There are several trees within the project limits that potentially have limbs hanging out into the work zone; however, due to the location of the tree on private property, City of Madison Forestry is unable to perform the pruning prior to construction.

B (Vacant)

C Construction

Prior to performing any pruning, verify with the engineer that pruning is necessary and contact the property owner for permission to prune the tree. If the property owner does not give permission, work around the tree as necessary. Perform pruning work according to Article 209.4(e) of the City Standard Specifications and Standard Detail Drawing 2.05 of the City Standard Specifications. Limit pruning to only what is absolutely necessary to perform the work under this contract; however, the amount of pruning should be sufficient so that no limbs are damaged while performing the work. Limit the pruning on any tree to a maximum height of 14 feet. Have a certified arborist on site while performing any tree pruning, to direct the pruning activities.

Note that some species of trees may not be pruned at the time of year that this work is to take place. If any of these types of trees are encountered, work around the tree without any pruning.

D Measurement

The department will measure Pruning Tree as each individual pruning tree, acceptably completed.

E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

SPV.0060.02

Pruning Tree

EACH

Payment is full compensation for all pruning, cutting, contacting the property owner, and providing a certified arborist on site to direct the pruning.

58. Grubbing Special 72-Inch, Item SPV.0060.03.

A Description

This special provision describes grubbing of an existing tree stump according to standard spec 201 as described below.

B (Vacant)

C Construction

Access to remove existing tree stump is permitted from within the right-of-way and temporary limited easement shown on the plans.

Stabilize any embankments or drop offs caused by grubbing operations that would impact adjacent buildings or structures or native material located outside of the temporary limited easement.

Within the temporary limited easement remove existing tree stump and roots larger than 6-inches in diameter to minimum depth of 12-inches below the finished grade or greater if necessary to facilitate installation of temporary shoring and construction of retaining wall R-13-336. The existing exposed tree stump should be grubbed in its entirety to a minimum depth of 12-inches below the finished grade leaving no exposed remnants of the existing tree.

Backfilling of the area after removal of the stump and roots shall be performed by the contractor as part of this item according to the pertinent provisions of standard spec 207.

Dispose of tree material and roots according to standard spec 201. Burning or burying of roots will not be permitted.

D Measurement

The department will measure Grubbing Special 72-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.0060.03

Grubbing Special 72-Inch

EACH

Payment is full compensation for all stump and root removal and disposal, and backfilling.

59. Remove, Salvage, and Reinstall Bicycle Rack, Item SPV.0060.04.

A Description

This special provision describes removing and salvaging a bicycle rack as shown on the plans.

B (Vacant)

C Construction

Carefully remove the existing bicycle rack and disassemble of all materials outside of the right-of-way according to standard spec 204. Store the bicycle rack and associated mounting fasteners outside of the project limits for the duration of the project construction.

Upon completion of the project, reinstall the bicycle rack on the new concrete pad as designated in the plans. Provide fasteners as necessary to properly secure the bike rack to the new concrete pad.

D Measurement

The department will measure Remove, Salvage, and Reinstall Bicycle Rack by the each, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.04 Remove, Salvage, and Reinstall Bike Rack EACH

Payment is full compensation for disassembling, removing, relocating and reinstalling including any fasteners, disposal of any materials, and storage.

60. Precast Sign Post Base, Item SPV.0060.05.

A Description

This special provision describes constructing and installing precast sign post bases at locations shown on the plans and as hereinafter provided.

B Materials

All materials furnished for the work shall meet the requirements for the class of materials named.

Specific reference is made to the following sections of the standard specifications:

Concrete Masonry standard spec 501

Steel Reinforcement standard spec 505

Concrete Masonry shall be of a 3,200-psi minimum strength in 28 days. The 2-inch x 24-inch +1/3-inch insert shall be an ASTMA Designation 120 A53 Fed Spec P404, Schedule 40 untreated black pipe 2-inch diameter, with a galvanized rigid conduit coupling installed.

C Construction

Form the 24-inch x 11-inch precast base according to the details in the plan. Weld the coupling and pipe over 50 percent of the circumference. Center the insert in the base and plumb with the vertical axis of the base, and place so that the coupling is flush 1/8 inch with the top of the troweled surface of the base. The bottom of the insert extends a minimum of 1/8-inch below the base and shall remain open to permit drainage. Weld 3/8-inch by 8-inch reinforcing bar to the insert 8 inches from the top of the base and 8 inches from the bottom of the base to prevent the insert from rotating within the concrete base.

Set the signpost bases at the locations shown on the plans. The center of the finished installation shall be 2 feet 6 inches from the face of the adjacent curb. Upon request and reasonable notice from the contractor, the engineer will establish and stake the location for the sign post bases. The City of Madison Traffic Engineering Division Staff will verify all signpost base locations.

Coat the threads of the pipe and coupling in the base with graphite grease prior to assembly. Install the base and pipe as a unit, level with the finished grade of the surrounding surface with the pipe plumb. Tamp the material used for backfilling around the base in 6-inch layers to ensure the installation will remain plumb. Provide a one-year warranty that the signpost base installation shall remain plumb.

Remove and dispose of all excess excavation, surplus material and debris resulting from operations and satisfactorily repair and restore other work damaged by operations.

D Measurement

The department will measure Precast Sign Post Base as each individual precast sign post base, 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.0060.05

Precast Sign Post Base

EACH

Payment is full compensation for furnishing all materials; for the manufacture of the sign post base; for hauling, handling and installing the sign post base, including backfill.

61. Sign Post Base for Concrete Installation, Item SPV.0060.06.

A Description

This special provision describes constructing and installing the sign post bases in concrete sidewalk or pavement at locations shown on the plans and as hereinafter provided.

B Materials

The 2-inch x 16-inch sign post base shall be an ASTMA Designation 120 A53 Fed Spec P404, Schedule 40 untreated black pipe 2-inch diameter, with a galvanized rigid conduit coupling installed.

Waterproof anchoring cement for concrete shall be Unitex, Thorogrip 29/64 or equivalent.

C Construction

The sign post base shall consist of a 2-inch x 16-inch schedule 40 pipe with attached 2-inch rigid conduit galvanized coupling according to the details in the plan. Weld the coupling and pipe over 100 percent of the circumference.

Set the signpost bases at the locations shown on the plans. The center of the finished installation shall be 5 feet 0 inches (2 feet 6 inches for Advanced Street Name Sign Special installations) from the face of the adjacent curb or from the edge of paved shoulder. Upon request and reasonable notice from the contractor, the engineer will establish and stake the location for the sign post bases. The City of Madison Traffic Engineering Division Staff will verify all signpost base locations.

Box out all installations in hard surfaced areas (concrete) with a round PVC pipe with a minimum diameter of 3-inches or installed by drilling or core drilling a 3-inch hole all the way through the concrete to the base material. If drilling in architectural concrete pavement, cover the surface prior to drilling to protect the surface from drilling slurry. Coordinate all box out locations. With a temporary pipe 4 to 5 feet long, hand-tighten it into the insert. Drive the insert into the base material at a level/plumb position until the insert is flush with the top of the concrete. Shim insert to a level/plumb position with lag bolts or p.k. nails. All shims must be set below the concrete/insert. Remove temporary pipe, replace with permanent pipe, and tighten into insert with large pipe wrench until insert turns. Reset shims or add shims until pipe no longer turns. Retighten pipe and recheck level/plumb/top of concrete with insert. Patch concrete with a waterproof anchoring cement for concrete. Mix patch to a liquid consistency, not a paste. Pour patch until it is flush with the top of the insert. Recheck level/plumb/top of concrete with insert immediately due to fast setting time of cement. Additional cement may be required as it settles. Completed installation shall be level/plumb, solid, and able to support required sign post and signs. Patch shall be flush with adjacent concrete without exposed shims.

Coat the threads of the pipe and coupling in the base with graphite grease prior to assembly. Install the base such that the installed sign post will be plumb. Provide a one- year warranty that the signpost base installation shall remain plumb.

Remove and dispose of all excess excavation, surplus material and debris resulting from operations and satisfactorily repair and restore other work damaged by operations.

D Measurement

The department will measure Sign Post Base for Concrete Installation as each individual sign post base for concrete installation, 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.0060.06

Sign Post Base for Concrete Installation

EACH

Payment is full compensation for furnishing all materials; for the manufacture of the sign post base; for hauling, handling and installing the sign post base, including drilling holes in concrete; and anchoring cement.

62. Manholes 8x8-FT Special, Item SPV.0060.07.

A Description

The work under this item shall be according to standard spec 611 and as hereinafter provided and as detailed in the plans.

Replace standard spec 611.2(3) with the following:

The use of a precast structure is prohibited.

B (Vacant)

C Construction

Construct Manholes Special 7x7-FT and 8x8-FT, respectively in the same fashion as a Manhole 6x6-FT with an interior dimension of 7 and 8 feet, respectively.

D Measurement

The department will measure Manholes 7x7-FT and Manholes 8x8-FT by each structure, 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.0060.07

Manholes 8x8-FT

EACH

Payment is full compensation according to standard spec 611.5.

63. Sidewalk Trench Drain, Item SPV.0060.08.

A Description

This special provision describes furnishing and installing trench drains and grates in concrete sidewalk.

B Materials

Furnish Neenah R-4990-CX with Type D grate or East Jordan Iron Works (EJ) 12-inch trench drain assemblies 6953 with solid trench drain cover or approved equal.

Furnish concrete for cast in place concrete structures according to standard spec 611, including tie bars as shown on the plans.

Furnish polyvinyl chloride (PVC) drain pipe to provide connection into storm sewer inlet as shown in the plans.

C Construction

Construct sidewalk trench drain according to standard spec 611, the plan details, and the manufacturer's recommend installation procedure.

D Measurement

The department will measure Sidewalk Trench Drain by each drain, 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.0060.08

Sidewalk Trench Drain

EACH

Payment is full compensation according to standard spec 611.5, including all excavating, backfilling, disposing of surplus material, PVC drain pipe, bends, and connections necessary to complete the work.

64. Concrete Pipe Support, Item SPV.0060.09.

A Description

This special provision describes constructing a concrete masonry support between storm sewer and local utilities as detailed in the plans and as hereinafter specified.

B Materials

Furnish concrete materials conforming to standard spec 611.2.

Furnish backfill materials conforming to standard spec 209.2.

C Construction

Construct according to the plans and standard spec 209.2 and 611.3.

D Measurement

The department will measure Concrete Pipe Support as each individual concrete support, 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.0060.09 Concrete Pipe Support EACH

Payment is full compensation for providing all materials, including all masonry; for all excavating, backfilling, disposing of surplus material, insulation, concrete masonry, curing, protecting and for cleaning out and restoring the work site.

65. Reconstruct Bench and Flowlines, Storm Sewer, Item SPV.0060.10.

A Description

The work under this item shall be according to standard spec 611 and as hereinafter provided:

B (Vacant)

C Construction

Pour concrete the bottom of the existing structure to raise the invert elevation as shown on the plans. Hand form a flow line to allow flow into pipe P12-9.

D Measurement

The department will measure Reconstruct Bench and Flowlines, Storm Sewer as each individual reconstructed bench and flow line, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT

SPV.0060.10 Reconstruct Bench and Flowlines, Storm Sewer EACH

Payment is full compensation according to standard spec 611.5.

66. Utility Line Opening (ULO), Item SPV.0060.11.

A Description

Excavate and uncover utilities for the purposes of determining elevation and potential conflicts, as shown on the plans or as directed by the engineer, and as hereinafter provided.

B (Vacant)

C Construction

The excavation will be done in such a manner that the utility in question is not damaged and the safety of the workers is not compromised.

Perform the ULO as soon as possible and at least 10 days in advance of proposed utility construction to allow any conflicts to be resolved with minimal disruption. Where utilities are within 6 feet of each other at a potential conflict location, only one utility line opening will be called for. In these cases, a single utility line opening will be considered full payment to locate multiple utilities. Utility line openings will include a trench up to 5 feet long as measured at the trench bottom, and of any depth required to locate the intended utility.

All utility line openings will be approved and coordinated with the engineer. The utility engineers or their agents will be notified of this work a minimum of 3 days prior to the work so they may be present when the work is completed. The need for performing ULO's as shown on the plans will be verified since some of the utilities may have been relocated prior to the start of construction.

Replace pavement open to traffic within 24 hours of the excavation.

D Measurement

The department will measure Utility Line Opening (ULO) by the unit, acceptably completed. Where utilities are within 5' of each other at a potential conflict location, only one utility line opening will be measured.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT
SPV.0060.11 Utility Line Opening (ULO) EACH

Payment is full compensation for the excavation required to expose the utility line, backfilling with existing material removed from the excavation, compacting the backfill material, restoring the site, cleanup, and for all labor, tools, equipment, transportation, and incidentals to perform the work.

Existing pavement, concrete curb, gutter, and sidewalk removals necessary to facilitate utility line openings will not be considered part of or paid for under Utility Line Openings but will be considered separate and measured and paid for separately as removal items. Replacement pavement, concrete curb, gutter, and sidewalk items will also be considered separate from Utility Line Openings and will be measured and paid for separately.

67. Locate and Reference Property Corners, Item SPV.0060.12.

A Description

This work consists of locating and referencing existing property corners within or adjacent to temporary limited easements. Locate and provide adequate reference ties for existing property corners which may be disturbed during construction such that the original monument position may be re-established upon completion of construction.

B (Vacant)

C Construction

Approve the methods with the engineer prior to beginning the work. Use a degree of accuracy for the survey work consistent with A-E 7.06 of the Wisconsin Administrative Code.

D Measurement

The department will measure Locate and Reference Property Corners as each individual locate and reference property corners, 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.0060.12

Locate and Reference Property Corners

EACH

Payment is full compensation for furnishing all survey work necessary to locate and reference the landmark, and for resetting damaged monumentation.

All survey notes and computations used in referencing property corners shall be given to the engineer within 21 days of completing work under the above item and must be received before final payment for the work will be made.

68. Reset Property Corners, Item SPV.0060.13.

A Description

This work consists of the setting of property corners that have been damaged or destroyed during construction operations which were unavoidable. Note that this item does not apply to items damaged due to negligence or relieve the contractor of other responsibilities as outlined in standard spec 107.11.

B Materials

Match the original monumentation requirements for Reset Property Corners to meet the minimum requirements below:

Round iron bars at least 24 inches (610 mm) long and weighing not less than 1.5 pounds per linear foot (2.23 kg/m)."

C Construction

When drive-in monuments are to be used, drive them into the ground with the top flush with the surface. In unstable soils the increase the depth as directed by the engineer to obtain a suitable foundation for the monument. No additional compensation will be made for the increased depth of monument

D Measurement

The department will measure Reset Property Corners as each individual reset property corners, acceptably completed.

E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

SPV.0060.13

Reset Property Corners

EACH

Payment is full compensation for furnishing, placing, and adjusting property corners.

69. Street Light Removal, Item SPV.0060.14, Traffic Signal Removal, SPV.0060.15.

A Description

This special provision describes removing and salvaging a base mounted light pole and traffic signal pole, direct bury light pole, transformer base, arm, signal head and luminaire.

B (Vacant)

C Construction

Contact Jerry Schippa, (608) 267-1969, at least seven days prior to removing any street lights on the City of Madison lighting system or traffic signals maintained by the City of Madison. Arrange a meeting to document the existing condition of all street lighting materials that will be affected by construction activities.

The City of Madison will provide the following information.

- 1. Identify all items to be salvaged or disposed
- 2. Identify existing feed-point locations and circuit breaks.

When removing existing street lights and traffic signals, carefully remove and stockpile all equipment at a location approved by the engineer. Place all equipment on blocks so as not to be in direct contact with the ground. Protect luminaires and signal heads from moisture. Either reinstall lights as the plans show or make available for City of Madison to pick up and salvage. Properly dispose of any equipment that the city does not salvage. Lighting units are considered a hazardous material, and shall be disposed of in an environmentally sound manner

Replace any equipment damaged in the removal process with equipment that is of greater or equal quality than the damaged piece.

D Measurement

The department will measure Street Light Removal as each individual removed street light, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.14Street Light RemovalEACHSPV.0060.15Traffic Signal RemovalEACH

Payment is full compensation for removals, stockpiling, and disposal as required above.

70. Lighting Control Cabinet, Item SPV.0060.16.

A Description

This special provision describes furnishing and installing a lighting control cabinet with all electrical components and wiring assembled.

B Materials

B.1 Contactors

Furnish 8-pole, 30-amp, 600-V electrically held contactors with 120-V control coil in NEMA 1 enclosure as required for the proposed circuits. Engrave "ALL NIGHT" or "MIDNIGHT" identification on cover of respective enclosures.

B.2 Photocell

Furnish a button type photocell and install as shown on the detail. Apply silicone caulk to maintain the watertight integrity of the enclosure. The photocell shall be rated for 120V, 1500W with 30-60 second delay between "on-off" operations.

B.3 Panel

Furnish a 120/240-volt, 100A main circuit breaker, single-phase, 20-circuit panel board in a NEMA 1 enclosure. Provide copper ground and split neutral bus bars in addition to copper bus bars. Provide bolt-on, thermal-magnetic circuit breakers that clearly indicate ON, OFF, or TRIPPED position in the panel. Provide double pole breakers as required for all multiwire branch circuits.

B.4 Time Clock

Furnish a time clock with an 8-year lithium battery time backup, -40° F to 120° F operating range, 40-year program schedule retention, LCD type, daylight saving time, and leap year correction. Program as required by the City of Madison.

B.5 Selector Switches

Furnish "Hand-Off-Auto" switches to control each circuit separately. Provide a "Hand-Off-Auto" legend plate for each switch. Engrave "ALL NIGHT" and "MIDNIGHT" above each appropriate operator. Mount the switches in a horizontal manner in a NEMA 1 enclosure.

B.6 Cabinet Enclosure

Provide a NEMA 4X enclosure made from .125-inch Type 5052-H32 aluminum. The doorframe shall be double flanged and all exterior seams shall be ground smooth. Door handle shall be 3/4-inch diameter stainless steel with three point latching system and hasp. Main door shall be sealed with a closed-cell neoprene gasket. Main door hinge shall be continuous 0.075-inch thick stainless steel with a 0.25-inch stainless steel hinge pin. Provide an aluminum-mounting panel at back (interior) of enclosure. Provide a weatherproof pad lock with 2-3/8-inch wide body, repinnable/replaceable cylinder, and five keys. There shall be no louvers or Corbin main door lock. Applicable code working clearances shall be maintained between equipment mounted within the enclosure.

B.7 Surge Arrester

Furnish a surge suppressor to protect the panel board. The surge suppressor shall provide 6 modes of surge protection, meet UL1449 Second Edition with 32Ka per phase and 48KA system peak surge current, contain LED line indicators, and approximate dimensions of 4.54-inch X 2.58-inch X 0.22-inch. Connect the surge suppressor to the branch circuit breaker as indicated on the plans.

B.8 Field Wiring Termination Blocks

All connections from the field wiring to equipment in the lighting control cabinet shall be made through termination blocks. Provide quantity of channel mount, NEMA type single terminal blocks as indicated on plans that are capable of holding #12 to #1/0 wire with solderless box lugs, for power, neutral and grounding connections. Mount the terminal blocks on a mounting channel of appropriate length with end anchors and an end barrier. Each terminal block shall have a label indicating the appropriate circuit number, neutral ('N') or ground ('G') wire connected to block; handwritten numbers and letters are not acceptable means of identification. Make connections from the underground field wiring to the equipment in the lighting control cabinet through distribution blocks.

B.9 Convenience GFI Receptacle and Cabinet Light Fixture

Furnish a 20 ampere, 120 commercial grade GFI duplex receptacle within a galvanized steel outlet box with cover. 150 watt, 250 volt commercial grade lamp holder with galvanized steel box and 60 watt incandescent bulb. Furnish switch to turn on cabinet light by opening the cabinet door.

B.10 Incidental Materials

Secure all wiring using screw attachment type straps; adhesive type shall not be allowed.

C Construction

Assemble the control cabinet as shown on the plans. Pretest the cabinet prior to shipment to the site. Mount all equipment to panel in enclosure. Train the cables in straight horizontal and vertical directions and be parallel next to and adjacent to other cables whenever possible. Mount the cabinet to the concrete base per the manufacturer's requirements. The work under this bid item includes connection and termination to the feeder system wiring.

D Measurement

The department will measure Lighting Control Cabinet 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.0060.16

Lighting Control Cabinet

EACH

Payment is full compensation for furnishing and installing photo control, contactors, panel, distribution blocks, surge arrestor, enclosure, grounding, wiring and electrical components; mounting to the concrete base.

- 71. LED Luminaire and Mounting Bracket Type 1, Item SPV.0060.17;
 - LED Luminaire and Mounting Bracket Type 2, Item SPV.0060.18;
 - LED Luminaire and Mounting Bracket Type 3, Item SPV.0060.19;
 - LED Luminaire and Mounting Bracket Type 4, Item SPV.0060.20;
 - LED Luminaire and Mounting Bracket Type 5, Item SPV.0060.21.

A Description

This item number includes furnishing and installing lighting fixture luminaires.

B Materials

B.1 Material Qualifications

Provide an integral LED lighting unit. All parts not specifically mentioned, which are necessary and are regularly furnished in order to provide a complete unit, shall be furnished by the successful bidder at the bid price and shall conform in quality of material and workmanship to that usually provided by the engineering practice indicated in this specification.

Furnish luminaires of the "cutoff" type conforming to all general aspects for luminaires as specified under standard spec 659 except as modified herein. All equipment to be furnished shall be new, unused, and the latest model being produced. The LED Luminaire Types shall be as follows:

- Type 1: TLM-E02-LED-E1-SL2-BK-8030-DIM
- Type 2: TLM-E03-LED-E1-SL2-BK-8030-DIM
- Type 3: TLM-E03-LED-E1-SL3-BK-8030-DIM
- Type 4: TLM-E04-LED-E1-SL2-BK-8030-DIM
- Type 5: TLM-E04-LED-E1-SL3-BK-8030-DIM

B.2 Manufacturer's Warranty

The manufacturer shall warrant that goods provided for this project will conform to applicable specifications, drawings, designs, samples, descriptions and will be free from defects in material and workmanship and will be fit for the particular purpose intended by the city.

This warranty shall remain in effect for one year. The warranty period commences on the date the luminaires are installed.

Under this warranty, the manufacturer agrees to replace within a reasonable time, any part, feature or product found to be defective during the warranty period at no cost to the City of Madison.

New lighting units will not be accepted before luminaires and lamps have operated without failure for a period of at least 10 consecutive nights.

C Construction

Install LED Luminaires and Mounting Bracket (Type) according to the pertinent provisions of standard spec 659 and as the manufacturer directs.

D Measurement

The department will measure LED Luminaires and Mounting racket (Type) as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.17	LED Luminaire and Mounting Bracket Type 1	EACH
SPV.0060.18	LED Luminaire and Mounting Bracket Type 2	EACH
SPV.0060.19	LED Luminaire and Mounting Bracket Type 3	EACH
SPV.0060.20	LED Luminaire and Mounting Bracket Type 4	EACH
SPV.0060.21	LED Luminaire and Mounting Bracket Type 5	EACH

Payment is full compensation for furnishing all materials, including all luminaires and side of pole mounting hardware.

72. Pole Aluminum 20-Foot Street Light, Black, Item SPV.0060.22.

A Description

This special provision describes Poles Aluminum 20-Foot Street Light (BLACK) according to the plans and as hereinafter provided. It is the intent to describe in these specifications minimum functional and design requirements for aluminum light poles for the City of Madison, Wisconsin.

Poles under this bid item shall be powder coated black.

B Materials

Provide all poles that conform to the electrical detail drawing in the plans; the manufacturer's approved shop drawing; and these specifications. Submit exceptions to these specifications and city drawings to the engineer for review prior to manufacturing. Coordinate mounting needs with the LED luminaires selected for the project prior to ordering poles to ensure mounting and wire raceway holes are compatible with the selected LED luminaires.

Provide poles that have round aluminum shafts with a base welded to the lower end of each.

Certify that all poles have been designed to withstand a 90-mile-per-hour sustained wind velocity and a 117-mile-per-hour gust velocity, with one light fixture attached.

B.1 Shaft

Provide a grounding nut or nut holder for accommodating a 1/2 inch 13 UNC threaded bolt or stud on the inside of the shaft immediately opposite the center of the handhole. Provide poles that after fabrication and assembly, will have no sharp edges, corners or points on both the interior and exterior surfaces, except at the base plate. Restore to the design alloy by heat treating after fabrication.

B.2 Pole Coatings

Confer with Jerry Schippa of City Traffic Engineering, (608) 267-1969, as to the specifications for a black anodized finish in order to assure the city that the city's desires are being fulfilled. Spin the poles using a fine (120) grit. Provide a uniform finish appearance free from any streaking during the pole extrusion, spinning and anodizing.

Use a two-step matte black anodizing finish (AA-C22-A44-Black) or an alternate process which produces a dark black finish. A light black finish is not acceptable.

B.3 City Approval of Shop Drawings

Submit shop drawings to the City of Madison Traffic Engineering Division, PO Box 2986, Madison, WI 53701-2986, Attn: Jerry Schippa. Manufacture no poles until the city has approved the shop drawings. city review and approval of shop drawings will be done within three work days of their receipt unless revisions to shop drawings are necessary as determined by the city.

C Construction

Construct according to standard spec 657.

D Measurement

The department will measure Poles Aluminum 20-Foot Street Light, Black 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.0060.22

Poles Aluminum 20-Foot Street Light, Black

EACH

Payment is full compensation for furnishing and installing poles, all hardware and fittings necessary to completely install the pole; for corrosion prevention where required; for installing identification required plagues.

73. Pole 30-Foot, 11 Gauge, Item SPV.0060.23; Pole 30-Foot, 7 Gauge, Item SPV.0060.24;

Pole 20-Foot, 7 Gauge, Item SPV.0060.25.

A Description

This special provision describes furnishing and installing poles and arms according to standard spec 657, the details shown on the plans, and these special provisions.

B Materials

Provide round poles, with a base plate welded to the bottom end of the pole. All 20 foot and 30 foot poles are to be a single section, with an eight-inch diameter shaft at the base and 0.14 inches per foot taper. All 30 foot poles are to be a single section, with an eight and 11/16-inch diameter shaft at the base and 0.14 inches per foot taper.

Provide base plates wait ha a slotted opening for anchor bolts.

Certify that all 30-foot poles have been designated to withstand a 90 mile per hour sustained wind velocity and 117 mile per hour gust velocity with the bracket arm and luminaires in place.

Use 20-foot 7 gauge poles for supporting aluminum trombone arms holding signs and/or signal heads.

Provide a 4" x 6 ½" galvanized handhole with contoured or flat cover plate joined to the reinforced handhole frame with two bolts. Locate the handhole at 90 degrees clockwise from the bracket arm side of poles as viewed when looking down from the top of the pole. The center of the handhole should be 14 inches from the bottom of the pole. Provide a solid metal bracket, with a drilled and tapped hole for securing cover plate bolts. Clips for holding these bolts are not acceptable. The machine bolts shall be a slotted hex-head style.

Fabricate the pole shaft from the herein specified manufacturer's best grade, hot rolled basic option hearth, or basic oxygen process steel. Provide a shaft with only one longitudinal, electrically welded joint, with the strength rated at not less than 100 percent of the yield strength of the steel and shall have no intermediate horizontal joints or welds. Only one length of steel shall be used, and form it into a continuously tapered shaft, having a taper of approximately 0.14 inches per foot. Provide smooth welds allowing the specified taper to be constant. Provide a pole that is within ½" in 10 feet of being straight and centered on its longitudinal axis.

Provide a grounding nut or nut holder for accommodating a ½ inch x 13 UNC threaded bolt or stud on the inside of the shaft immediately opposite the center of the handhole. Make the nut completely free of any metal residue that would prevent a bolt from easily screwing entirely into the nut.

Provide all poles holding LED fixtures with mounting and wire raceway holes placed before being hotdipped galvanized. Coordinate mounting needs with the LED luminaires selected for the project prior to ordering poles.

Furnish and install a pole-top cover and four nut covers for each pole.

Provide each steel pole with a permanent imprinted metal label attached with rivets midway between the base plate and the handhole. State the overall pole height, shaft gauge, and year of manufacture on the label. Provide a label that will conform to the curvature of the pole and not have any sharp edges or corners. Install rivets so they are smooth inside and outside of the pole.

Thoroughly clean the exterior surface of the pole, arm, and hardware to make them free of all loose rust, mill scale, dirt, oil, grease, and other foreign substances after all welding has been completed. Hot-dip galvanized the poles and arms according to the requirements of ASTM Designation A123. Hot-dip galvanize the hardware according to ASTM designation A153. Provide a bright, shiny, and uniform galvanized finish. Matted or dull pole sections will not be accepted.

Furnish non-shrink commercial grout from approval products list.

B.1 Pole Coatings

Confer with Jerry Schippa of City Traffic Engineering, (608) 267-1969, as to the specifications for a black anodized finish in order to assure the city that the city's desires are being fulfilled. Spin the poles using a fine (120) grit. Provide a uniform finish appearance free from any streaking during the pole extrusion, spinning and anodizing.

Use a two-step matte black anodizing finish (AA-C22-A44-Black) or an alternate process which produces a dark black finish. A light black finish is not acceptable.

C Construction

Set and plumb metal poles with the use of leveling nuts furnished with the anchor bolts. Level luminaires after erecting and leveling the metal standards with bracket arms. The proper leveling method may be obtained from the manufacturer's instruction manual. Torque nuts on anchor and transformer bolts to 175-200 foot pounds or as directed by the engineer. Provide rust, corrosion, and snit-seize protection at all threaded assemblies by coating and mating surfaces with Markal (hightemp – E-Z Break), Never-Seez (Marine Grade), LPS 100, Lubriplate, or approved equal.

Attach the stranded copper ground wire that is installed as a part of the base construction with an approved connector (Fargo GC 202 or approved equal) to a ground nut locate inside the pole opposite the handhole.

When transformer bases are not installed, trowel grout between the pole and concrete base and finished at an angle from the edge of the pole base to the outer edge of the foundation. Leave a ½ inch slot for drainage through the grouting on the street side at the top of the concrete base.

D Measurement

The department will measure Pole (description) 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.0060.23	Pole 30-Foot 11 gauge	EACH
SPV.0060.24	Pole 30-Foot 7 gauge	EACH
SPV.0060.25	Pole 20-Foot 7 gauge	EACH

Payment is full compensation for furnishing and installing poles, all hardware and fittings necessary to completely install the pole; for corrosion prevention where required; for installing identification required plaques.

74. Electrical Pullbox, Type I, Item SPV.0060.26; Electrical Pullbox, Type III, Item SPV.0060.27;

Electrical Pullbox, Type V, Item SPV.0060.28;

Electrical Pullbox, Type VII, Item SPV.0060.29.

A Description

Furnish and install electrical pull boxes according to standard spec 653, the plan details, and as hereinafter provided.

B Materials

Electrical Pullbox, Type I shall be gray-colored polymer-concrete construction. Box dimensions for Type I shall be 19" wide X 32" long X 24" deep. The Type I box and cover shall be rated to withstand 15,000 lbs over a 10" square with a minimum test load of 22,568 lbs.

Electrical Pullbox, Type III shall be high-density polyethylene box and concrete polymer lid or concrete polymer construction for box and lid. Box dimensions for Type III shall be 12" wide X 12" long X 12" deep. The Type III box and polymer cover shall be rated to withstand 20,000 lbs.

Electrical Pullbox, Type V shall be high-density polyethylene box and concrete polymer lid or concrete polymer construction for box and lid. Box dimensions for Type V shall be 24" wide X 36" long X 24" deep. The Type V box and polymer cover shall be rated to withstand 20,000 lbs.

Electrical Pullbox, Type VII shall be high-density polyethylene box and concrete polymer lid or concrete polymer construction for box and lid. Box dimensions for Type VII shall be 30" wide X 50" long X 36" deep. The Type VII box and polymer cover shall be rated to withstand 20,000 lbs.

Each cover shall have the logo "TRAFFIC SIGNAL" imprinted from the manufacturer.

C Construction

Install Electrical Pullbox (Type) according to the pertinent provisions of standard spec 653.3 and the plan details.

D Measurement

The department will measure Electrical Pullbox (Type) as each individual electrical pullbox (type), acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.26	Electrical Pullbox, Type I	EACH
SPV.0060.27	Electrical Pullbox, Type III	EACH
SPV.0060.28	Electrical Pullbox, Type V	EACH
SPV.0060.29	Electrical Pullbox, Type VII	EACH

Payment is full compensation for furnishing and installing all materials, including crushed aggregate; for excavation, backfill, and disposal of surplus materials; and for furnishing all labor, tools, equipment, and incidentals necessary to complete this item of work.

75. Concrete Base Type G, Item SPV.0060.30;

Concrete Base Type LB-2, Item SPV.0060.31;

Concrete Base Type LB-3, Item SPV.0060.32;

Concrete Base Type LB-8, Item SPV.0060.33;

Concrete Base Type P. Item SPV.0060.34;

Concrete Base Type M, Item SPV.0060.35.

A Description

Construct concrete foundations, including furnishing and installing necessary hardware, as shown on the plans, according to the pertinent provisions of standard spec 654, and as hereinafter provided.

B Materials

Furnish Grade A, A-WR, A-FA, or A-IP concrete masonry conforming to the requirements of standard spec 501. Conduit cast within the bases shall be Schedule 40 polyvinyl chloride (PVC) electrical conduit and shall conform to the requirements of standard spec 652.

Furnish anchor bolts for Type G bases made from high-strength steel (50 ksi minimum yield strength), ASTM A36, and fit each with two hard washers and two heavy hex nuts. Each bolt shall have approximately 3 inches or more of thread at the top end. The bolts, washers and nuts shall be galvanized

Furnish anchor bolts for LB-2, LB-3, LB-8 and Offset bases made from high-strength steel (50 ksi minimum yield strength), ASTM A36, and fit each with two hard washers and two heavy hex nuts. Each bolt shall have approximately 6 inches or more of thread at the top end. The bolts, washers, and nuts shall be galvanized.

Furnish ¾-Inch x 19-Inch bolts for the LB-2 bases. Furnish 1 ¼-inch x 48-inch bolts for the LB-8 bases, including a 4-inch L-bend at the bottom. Furnish 1-inch x 40-inch bolts for the LB-3 bases, including a 4-Inch L-bend at the bottom. Furnish ¾ inch x 19 inch bolts for the Type G bases.

Include a concrete maintenance platform on the Type M and Type P bases. Generally, construct the Type M and Type P bases according to the standard detail drawing Concrete Control Cabinet Bases. Confirm the location of the conduits in the base with the City of Madison. Anchor bolts, nuts, and washers for Concrete Controller Base, Type P, will be provided and installed by the City of Madison when installing signal control cabinets. Conform bar steel reinforcement to the requirements of standard spec 505.

C Construction

Place the bases with one side parallel to the centerline of the street.

Forms shall be of sufficient depth to provide a minimum of 12 inches of formed base below the finished grade on the low side of the base. The top surface of the base shall be level with a ¾-inch bevel on the edges and shall be given a rubbed finish.

Cast anchor bolts into the base as shown on the plans. Verify the bolt circle diameters before constructing the bases.

Furnish and install manufactured elbows in all bases, except as noted on the details. Install elbows to permit installation of conduit in as nearly straight-line runs as possible without unnecessary bends. Bases not installed to this standard will not be accepted.

Extend existing conduit into the bases. Elbows shall conform to the requirements of the type of conduit entering the base. Install an extra elbow in each base at the end of a run as directed by the engineer. Install extra elbows in any base as directed by the engineer.

Do not erect poles on the concrete bases until the bases have cured for at least seven (7) days. All concrete bases require a rubbed finish down to finished grade.

D Measurement

The department will measure Concrete Base (Type) as each individual concrete base (type), acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.30	Concrete Base Type G	EACH
SPV.0060.31	Concrete Base Type LB-2	EACH
SPV.0060.32	Concrete Base Type LB-3	EACH
SPV.0060.33	Concrete Base Type LB-8	EACH
SPV.0060.34	Concrete Base Type P	EACH
SPV.0060.35	Concrete Base Type M	EACH

Payment is full compensation for furnishing and installing all materials including conduit, bushings, caps and/or plugs, ground rod, anchor bolts, cadwelding, copper grounding wire; bar steel reinforcement, and concrete masonry; for providing openings through existing pavement where required; for excavation, including hand-digging as required, backfill, and disposal of surplus materials.

76. Concrete Base Offset, Item SPV.0060.36.

A Description

This special provision describes construction of concrete street light bases and traffic signal bases, including necessary hardware, according to the pertinent provisions of standard spec 654 and as hereinafter provided.

B Materials

Provide Grade A, A-WR, A-FA, or A-IP concrete masonry conforming to the requirements of standard spec 501. Provide Schedule 40 polyvinyl chloride (PVC) electrical conduit that conforms to the requirements of standard spec 652 to be cast within the bases. Provide anchor bolts made from high strength steel (50 KSI minimum yield strength), ASTM A36, with each being fitted with two hard washers and two heavy hex nuts. Provide 6 inches or more of thread on each bolt at the top end. Galvanize the bolts, washers, and nuts. Provide bar steel reinforcement that conforms to the requirements of standard spec 505.

C Construction

Locate proposed street light and/or traffic signal bases as shown in the plans according to the Construction Staking Electrical Systems bid item. Where potential underground conflicts exist, locate the existing utility. Hand excavation may be required. MG&E gas requires an inspector to be present when excavating near MG&E gas facilities in accordance whether to adjust the base location laterally to avoid the conflict or require the use of an Offset Base. Install rock shield between the main and street light base and/or traffic signal base as directed by MG&E personnel. MG&E will supply the rock shield.

Provide forms of sufficient depth to provide a minimum of 12 inches of formed base below the finished grade on the low side of the base. Construct the top surface of the base to be level with a ¾ inch bevel on the edges and shall be given a rubbed finish.

Cast anchor bolts into the base as shown on the plans. Verify bolt circle diameters before constructing the bases.

Furnish and install manufactured elbows in all bases by the contractor, except as noted on the details. Install elbows to permit conduit to be installed in as nearly straight-line runs as possible, without unnecessary bends. Bases not installed to this standard will not be accepted.

Extend existing conduit into the bases. Construct elbows to conform to the requirements of the type of conduit entering the base. Provide and install an extra elbow at each base at the end of a run as directed by the engineer.

Install extra elbows in any base as directed by the engineer. Do not erect poles on the concrete bases until the bases have cured for at least seven days.

Provide a rubbed finish down to finished grade on all concrete bases.

D Measurement

The department will measure Concrete Base Offset as each individual concrete base offset, acceptably completed.

E Payment

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

SPV.0060.36 Concrete Base Offset EACH

Payment is full compensation furnishing and installing transformer bases, streetlight pole wire, mechanical grounding connector and related hardware; for leveling shims when required.

77. Transformer Base 16-Inch Steel, Item SPV.0060.37.

A Description

This special provision describes furnishing and installing steel transformer bases as shown on the plans and as follows.

B Materials

Provide hot-dipped galvanized steel transformer bases according to ASTM designation A123. Provide bases with slotted bolt openings. Furnish steel connecting bolts, size 1.00 inches by 4 inches, hold down lugs for 1.00 or 1.25 inch bolts and nuts and washers. Verify the bolt diameter projection and bolt circle dimension required for each application. Ensure the concrete bases and pole bases are compatible with the transformer bases and bolts. Hot-dip galvanize all material and verify they are of sufficient size and strength to exceed the capacity of the bases. Construct 16-Inch bases to conform to the detail in the plan.

Furnish to the engineer at the time of delivery of the bases, a manufacturer's certificate of compliance that the base and hardware as furnished meets the above requirements

B.1 Coatings

Confer with Jerry Schippa of City Traffic Engineering, (608) 267-1969, as to the specifications for a black anodized finish in order to assure the city that the city's desires are being fulfilled. Provide a uniform finish appearance free from any streaking during the anodizing. Use a two-step matte black anodizing finish (AA-C22-A44-Black) or an alternate process which produces a dark black finish. A light black finish is not acceptable.

C Construction

Install transformer bases according to the manufacturer's instructions, and as shown on the plans.

D Measurement

The department will measure Transform Base (Size) Steel as each individual transformer base (size) steel, acceptably completed.

E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

SPV.0060.37

Transformer Base 16-Inch Steel

EACH

Payment is full compensation furnishing and installing transformer bases, streetlight pole wire, mechanical grounding connector and related hardware; for leveling shims when required.

78. Inlet Covers Flat Temporary, Item SPV.0060.38.

A Description

This special provision describes furnishing, installing, adjusting and removing temporary inlet covers on 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 inlet or manhole cover and place the temporary inlet cover on the 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 NUMBERDESCRIPTIONUNITSPV.0060.38Inlet Covers Flat TemporaryEACH

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)

79. NEMA TS2 Type 1 Traffic Signal Control Cabinet, Item SPV.0060.40.

A Description

This specification describes furnishing a fully configured and equipped, sixteen channel (minimum), NEMA TS2 Type 1 traffic signal control cabinet for testing by the city and subsequent contractor installation. The traffic signal control cabinet provided shall be capable of operating the intersections as shown in the plans.

B General Requirements

Furnish and install equipment and assemble the cabinet conforming to the latest revision of NEMA Standards Publication TS Version 2.06 (R2008), Traffic Controller Assemblies with NTCIP Requirements, National Electrical Manufacturers Association, hereinafter called NEMA TS2 Standard, except where modified in this specification. Conform all work to the Wisconsin State Electrical Code (WSEC).

Provide a traffic signal control cabinet designed for TS2 Type 1 operation. Pre-wire cabinet for a minimum of sixteen phases as specified herein. Provide a second harness ready for communication between the traffic signal control cabinet itself and a NEMA TS2 Type 2 Traffic Signal Controller. TS2 Type 2 harness should be easily connected without having to drop the back panel or modify the wiring on the power panel.

Furnish and install at no extra cost any equipment and materials not specifically described but required in order to perform the intended functions in the cabinet.

The City of Madison will install this item as part of the construction of this project.

Furnish and install at no extra cost any equipment and materials not specifically described, but required in order to perform the intended functions in the cabinet.

C Materials

C.1 Cabinet Design

Furnish a door-in-door ground mounted (without anchor bolts) aluminum cabinet of clean-cut design and appearance. Provide a cabinet of minimum size 44 inches wide, minimum 24 inches deep and minimum 52 inches to maximum 60 inches high. The size of the cabinet shall provide ample space for housing the controller, all of the associated devices which are to be furnished with the controller, all other auxiliary devices herein specified, and all equipment to be furnished and installed by others.

Provide cabinets designed for TS2 Type 1 operation. Pre-wire cabinets for a minimum of sixteen phases as specified herein. Provide a second harness ready for communication between the cabinet itself and a NEMA TS2 Type 2 Traffic Signal Controller. TS2 Type 2 harness should be easily connected without having to drop the back panel or modify the wiring on the power panel.

The cabinet shall comply with the environmental and operating standards outlined in the NEMA TS2 Standard. The cabinet shall provide reasonable vandalism protection. The cabinet shall have a NEMA 3R rating.

Construct the cabinet from type 5052-H32 aluminum with a minimum thickness of 0.125 inches. Furnish the cabinet with a natural, uncoated, aluminum finish inside and outside. Continuously weld all seams. The surface shall be smooth, free of marks and scratches. Use stainless steel for all external hardware.

On the top of the cabinet, incorporate a 1-inch slope toward the rear to prevent rain accumulation. Incorporate a rain channel into the design of the main door opening to prevent liquids from entering the enclosure.

Include an exhaust plenum with a vent screen into the roof of the cabinet. Perforations in the vent screen shall not exceed 0.125 inches in diameter. Insulate the remaining area of the roof of the cabinet with a moisture resistant rigid foam board insulation with a minimum R value of 4.0 that can be perforated for an antenna.

Equip the lower section of the cabinet door with a louvered air entrance. The air inlet shall be large enough to allow sufficient air flow per the rated fan capacity. Louvers must satisfy the NEMA rod entry test for Type 3R ventilated enclosures. Secure a washable, aluminum, removable air filter to the air entrance. The filter shall fit snugly against the cabinet door wall. Attach an aluminum, easily removable, gasketed cover over the air filter and louver.

Provide arc flash protection within the cabinet as needed to satisfy NFPA 70E and OSHA requirements.

C.2 Doors

The cabinet door opening shall be a minimum of 80 percent of the front surface of the cabinet. The main door and police door-in-door shall each close against a weatherproof and dust-proof, closed-cell neoprene gasket seal. The gasket material for the main door shall be a minimum of 0.188 inches thick by 1.00 inch wide. The gasket material for the police door shall be a minimum of 0.188 inches thick by 0.500 inches wide. Permanently bond the gaskets to the cabinet.

Equip the main door with a three-point latching mechanism. The upper and lower locking points of the latching mechanism shall each have a pair of nylon rollers. The handle on the main door shall utilize a shank of stainless steel 3/4 inches minimum diameter. The handle shall include a hasp for the attachment of an optional padlock. The cabinet door handle may turn either clockwise or counterclockwise to open, and shall not extend outwards past the edge of the door at any time. Position the lock assembly so the key will not cause any interference with the handle, or a person's hand on the handle, when opening the cabinet door.

Include on the main door a solid stainless steel rod stop and catch mechanism capable of rigidly holding the door open at approximately 90, 120, and 180 degrees under windy conditions. The operator must be able to engage and disengage the catch with a shoed or booted foot.

The main door hinge shall be a one-piece, continuous piano hinge with a minimum 0.25 inch stainless steel pin running the entire length of the right side of the door (right-handed). Attach the hinge in such a manner that no rivets or bolts are exposed.

Equip the main door with a brass Corbin tumbler lock No. 2, swing away dust cap. Provide two No. 2 keys. Equip the police door-in-door with a standard police lock and provide one key.

Electrically bond the door to the rest of the cabinet with a braided copper grounding conductor. The length of the grounding conductor shall allow the door to swing fully open, without using the stop bar, without stretching or breaking the grounding conductor. The grounding conductor shall not interfere with normal door operation.

Provide a door switch for the main cabinet door. When the door is opened the switch shall send a signal to the controller sufficient for the controller to log an alarm.

C.3 Shelves and Mountings

Mount a minimum of three vertical "C" channels on each interior side wall of the cabinet for the purpose of mounting the cabinet components. The channels shall accommodate spring mounted nuts or studs. Install three vertical "C" channels or three slotted rails on the interior back wall of the cabinet. All mounting channels and rails shall extend to within 7 inches of the top and bottom of the cabinets and shall be of sufficient strength to rigidly hold specified shelves and equipment.

Provide two full-width, 11-inch deep, fully adjustable, aluminum shelves to support the controller and other equipment. Mount the lower shelf at a height above the bottom of the cabinet such that the shelf and attached drawer does not interfere with the ability to tilt the terminal facility forward on its hinges for maintenance purposes. Mount the top shelf at least 13 inches above the surface of the lower shelf.

The controller and MMU2 will be located on the lower shelf. Locate the loop detector racks and other auxiliary equipment on the top shelf. The power supply may be mounted on either shelf.

Provide an under-shelf drawer beneath the lower shelf. The drawer shall be approximately 20 inches wide and a minimum of 12" deep. The drawer shall operate easily and smoothly and shall have a stop to prevent inadvertently pulling the drawer out of its support. Design the stop to allow purposeful complete removal of the drawer without the use of tools. Provide a slide out shelf capable of supporting a 5 pound, 14" wide by 11" deep load. This slide out support can be the cover for the drawer, as long as it extends far enough out to support the entire 11" depth of the laptop.

Provide a fully wired receptacle on the door that is specifically designed to support the twist and lock style plug specified for the optional heater element. Locate receptacle such that when installed, heater should be mounted a minimum of 6.5" from the bottom of the door.

C.4 Auxiliary Cabinet Equipment

Ventilate the cabinet by means of a 120 VAC, 60HZ, tube axial compact type fan located in the top of the cabinet plenum. The fan's free delivery airflow shall be equal to or greater than 100 cubic feet per minute. The magnetic field of the fan motor shall not affect the performance of control equipment. The fan bearings shall operate freely. The fan unit shall not crack, creep, warp, or have bearing failure within a seven year duty cycle. The maximum noise level shall be less than 40 decibels. The fan unit shall be corrosion resistant. The thermostat's turn on setting shall be adjustable from 90 to 120 degrees F. The fan shall run until the cabinet temperature decreases below the turn-on temperature setting by approximately 30 degrees F. The fan shall be fused.

Mount a single LED light strip (GESS32-13200K or approved equal) at the top of the cabinet and the appropriate power supply to support up to four light strip panels. Wire the power supply to an ON/OFF toggle switch. Mount two LED light strips under the lower shelf fed off the power supply on the top of the cabinet. Locate one strip on each side of the drawer.

Provide a 250-watt element heater. The heater shall be mountable on the face of the aluminum, louvered air filter cover such that feed air is supplied through the cover. Provide a protective, ventilated cover over the heater. Provide a cord and twist-off plug that will connect to the electrical receptacle on the cabinet door. Provide a thermostat with an adjustable setting from 0 to 100 degrees F. Install the thermostat on the interior ceiling of the cabinet well away from the cabinet light or any heat source. Provide a thermal limit switch to prevent the heater's protective cover from exceeding 170 degrees F.

C.5 Terminal Facility

The terminal facility panel shall be constructed from 5052-H32 brushed aluminum of 0.125 inches minimum thickness and formed so as to eliminate any flexing when plug-in components are installed.

Mount the bottom of the terminal facility a minimum of nine inches from the bottom of the cabinet. Hinge the terminal facility at the bottom to allow easy access with simple tools to all wiring on the rear of the panel. It shall not be necessary to remove the lower shelf, the shelf drawer, or any shelf-mounted equipment to hinge down the terminal facility. Provide sufficient slack in the load bay wiring to allow for dropping the load bay.

Fully wire the terminal facility with sixteen load switch sockets: eight phases of vehicular, four phases of pedestrian, and four phases of overlap operation; eight flash transfer relay sockets; one flasher socket; and two terminal facility BIU rack slots. The use of printed circuit boards is not acceptable on the terminal facility, except printed circuit boards are acceptable for the BIU interface with the load bay. Position the 16 load switch sockets in two horizontal rows of eight sockets each. Support the load switches and flasher by a bracket or shelf extending at least three inches from the terminal facility. Label all terminals, load switches, and flash transfer relay sockets. Label reference designators by silk-screening on the front and rear of the terminal facility to match drawing designations.

Provide rack mounted BIU's. Provide a dual-row, 64-pin female DIN 41612 Type B connector for each BIU rack position. Provide card guides for both edges of the BIU. Terminal and facilities BIU mounting shall be an integral part of the terminal facility.

Provide two 16-channel, 8-position, TS2 detector racks, each with an integrally mounted BIU mounting. Rack shall be addressable. Power each detector rack by the cabinet power supply. Fasten the loop detector racks towards the left side of the top shelf.

For BIU rack connectors, provide pre-wired address pins or jumper plugs corresponding to the requirements of the NEMA TS2 Standard. The address pins or jumper plugs shall control the BIU mode of operation. BIUs shall be capable of being interchanged with no additional programming.

For the terminal facility, contain all field wires within one or two rows of horizontally-mounted Marathon (or approved equal) heavy duty terminal blocks. Terminate all field output circuits on an unfused terminal block with a minimum rating of 10 amps. Use mechanical connector lugs rated for copper wire. Angle the lower section of the terminal block out from the back of the cabinet at approximately a 45 degree angle.

Identify all field input/output (I/O) terminals by permanent alphanumeric labels. All labels shall use standard nomenclature per the NEMA TS2 Standard.

All field flash sequence programming at the field terminals shall be able to be accomplished with the use of only a screwdriver.

Wire field terminal blocks to use three positions per vehicle or overlap phase (green, yellow, red).

Wire one RC network in parallel with each flash transfer relay coil.

Permanently label all logic-level, NEMA-controller and MMU2 input and output terminations on the terminal facility. Identify the function of each terminal position on the cabinet drawings.

Terminal blocks for DC signal interfacing shall have a number 6-32 x 7/32 inch screw as minimum. Functions to be terminated shall be as specified in the listing of Input/Output Terminals in Section 5 of the NEMA TS2 Standard.

Conform all terminal facility and cabinet wiring to the WSEC. The green/walk, yellow, and red/don't walk load switch outputs shall be minimum 16 gauge wire. The MMU2 (other than AC power), controller I/O, and logic ground shall be minimum 22 gauge wire. All wire colors shall be consistent in all cabinets furnished in one order.

C.6 Vehicle Detection Interface Panel

Provide a 32-position interface panel or two 16-position panels. Each interface panel shall allow for the connection of 32 or 16 independent field loops, respectively. One panel shall allow for 4 EVP channel inputs. The panels shall have barrier strip type terminals using 8-32 screws and be rated for 20 inch pounds of torque.

Provide a ground bus terminal between each loop pair terminal to provide a termination for the loop leadin cable ground wire. Secure the interface panels to a mounting plate attached to the left interior side wall of the cabinet.

Provide a cable consisting of 20 AWG twisted pair wires to enable connection to and from the interface panel to a detector rack. The twisted pair wires shall be color-coded wires. Provide a cable of sufficient length to allow the detector racks to be placed on either shelf.

Provide a pathway or mechanism for securing loop lead in cables neatly next to interface panel.

Identify all termination points by a unique number silk screened on the panel.

C.7 Lighting Control Panel

Provide an intersection lighting control panel as described. The intersection lighting control panel shall consist of an aluminum panel 0.125 inches thick and approximately 5 inches by 10 inches. Determine the actual panel size by the cabinet's mounting rail placement. Attach to the panel a 2 pole-30 amp contactor-120vac coil (Square D #8910DPA32V02 or equal), and a heavy duty six position terminal block (Marathon DJ1606 or equal). Use wire sizes 10AWG for power and load wiring, and 16AWG for control wires. Wire the terminal strip as follows:

- a. Control coil
- b. L1 in
- c. L2 in
- d. Neutral in and control coil
- e. L1 out
- f. L2 out

Protect each output by a MOV (V150LA20A) wired between the output and neutral. Include a photo control (Intermatic #K4021C or equal). Mount the photo control just above the cabinet door and approximately 12 inches from the right side of the cabinet. Wire the photo control to a 3 position terminal strip using 16AWG wire color coded to match the photo control wiring connected to the intersection lighting control panel.

Provide panel cover that is secured on the top and bottom of the panel with a minimum of 4 thumb screws.

Provide a switch in the cabinet that can turn intersection lighting on/off.

C.8 Auxiliary Surge Suppressor

Provide and mount within the cabinet an auxiliary surge suppressor unit conforming to the following minimum requirements:

- 6-NEMA 5-15R receptacles
- 2700 ioule rating

Surge suppressor should be wired off a circuit breaker that is separate from the cabinet equipment such that if this circuit is faulted, the cabinet/controller and all associated equipment will still function.

C.9 Conductors and Cabling

All conductors in the cabinet shall be copper 22 AWG or larger. All 14 AWG and smaller wire shall conform to MIL-W-16878/1, Type B, 600V, 19-strand tinned copper. The wire shall have a minimum of 0.010 inches thick PVC insulation without clear nylon jacket and rated to 105 degrees Celsius. All 12 AWG and larger wire shall be UL or NRTL listed THHN/THWN 90 degrees Celsius, 600V, 0.020 inches thick PVC insulation, and clear nylon jacketed.

Provide controller and MMU2 cables of sufficient length to allow the units to be placed on either cabinet shelf in the operating mode. Connecting cables shall be sleeved in a braided nylon mesh. Exposed tiewraps and interwoven cables are unacceptable.

Provide the cabinet configuration with enough SDLC RS-485 Port 1 communication cables to allow full capabilities of that cabinet. Each communication cable connector shall be a 15-pin metal shell D subminiature type. The cable shall be a shielded cable suitable for RS-485 communications. Secure all connecting cables and wire runs by mechanical clamps. Stick-on type clamps are not acceptable.

Pre-wire the terminal facility for a Type 16 MMU2.

All wiring shall be neat in appearance. Stow excess cable behind the terminal facility or below the shelves in order to allow easy access to the terminal facility and cabinet components. All cabinet wiring shall be continuous from its point of origin to its termination point. Butt type connections/splices are not acceptable.

Wire the grounding system in the cabinet into three separate circuits: AC Neutral, Earth Ground, and Logic Ground.

Optoisolate all pedestrian pushbutton inputs from the field to the controller through the BIU and operate at 12 VAC.

Hook or loop all wire, size 16 AWG or smaller, at solder joints around the eyelet or terminal block post prior to soldering to ensure circuit integrity. Lap joint soldering is not acceptable.

C.10 Cabinet Switches

Locate the following switches on a maintenance panel on the inside of the cabinet door:

Controller On/Off

• Stop Time (Three Positions)

Position Switch Label Function

Upper Stop Time Place stop time on the controller

Center Run Remove the stop time input to the controller Lower Normal Connects the MMU2 to the controller stop time input

Locate the following switches behind the police access door:

- a. Signal/Off
- b. Flash/Normal
- c. Hand/ auto
- d. Coiled hand control and cable

The above switches shall function as follows:

Off: Signals Dark

Signal: Signals On and operating as follows:

<u>Auto</u> <u>Hand</u>

Flash: Signals Flash Signals Flash

Normal: Signals Normal Signals Advance by use of hand control

C.11 Power Panel

C.11.1 Design

The power panel shall consist of a separate module, securely fastened to the interior right side wall of the cabinet. Wire the power panel to provide the necessary power to the cabinet, controller, MMU2, cabinet power supply, and all auxiliary equipment. Manufacture the power panel from 0.090-inch, 5052-

H32 aluminum. Panel layout shall facilitate field inspection and maintenance accessibility without excessive disassembly or special tools.

Provide a light, tough, transparent, weather-resistant, non-yellowing, thermoplastic cover, rigidly mounted over the full power panel, with access holes for circuit breakers and other equipment, and open on the sides for ventilation.

All components of power panel shall meet or exceed the electrical requirements as laid out in section 5.4 of the NEMA TS2 Standard.

C.11.2 Grounding System

On each side of the cabinet, provide a minimum 20-position neutral bus bar capable of connecting three #12 AWG wires per position.

Also on each side of the cabinet, provide a minimum 20-position equipment ground bus bar capable of connecting three #12 AWG wires per position. Install this bus bar below the neutral bus bar.

C.11.3 Circuit Breakers

House in the power panel the following vertically mounted, single pole, 120 volts AC, 60 Hertz, circuit breakers, with the ON position being up:

- 1. One 30-amp signal breaker. This breaker shall supply power for all cabinet functions not powered through one of the other breakers or fuses listed below. Streetlights will be powered from outside the cabinet in the meter breaker pedestal. This breaker shall feed a signal bus supplied through a solid state bus relay and a radio interference line filter. The bus relay, in all cases, shall be a solid state contactor and shall not be jack mounted. Breakers shall be thermal magnetic type, UL listed, with a minimum of 22,000 amp interrupting capacity.
- 2. One 15-amp auxiliary breaker. This breaker shall supply power to the fan and heater.
- 3. One 10-amp breaker. This breaker shall supply power for control equipment: controller, MMU, and cabinet power supply.
- 4. One 20-amp circuit breaker for future use.

Power the cabinet light through the GFI fuse, not a circuit breaker.

C.11.4 Power receptacle

Mount a two-position, 120 VAC 20 amp, NEMA 5-20R GFCI convenience outlet on the interior right side wall above or as part of the power panel. The outlet shall be fully operational, and fuse protected.

C.12 Auxiliary Devices

C.12.1 Flashers

Provide one solid state flasher conforming to the requirements of section 6.3 of the NEMA TS2 Standard.

C.12.2 Flash Transfer Relays

Provide four flash transfer relays conforming to the requirements of section 6.4 of the NEMA TS2 Standard.

C.12.3 Cabinet Power Supply

Provide one power supply with each cabinet conforming to the requirements of section 5.3.5 of the NEMA TS2 Standard. Provide LED indicators for the 12 VDC, 12 VAC, and 24 VDC outputs. Provide jack plugs on the front panel for access to the +24 VDC for test purposes.

C.12.4 Load Switches

Provide sixteen solid state load switches conforming to the requirements of Section 6.2 of the NEMA TS2 Standard.

C.12.5 Bus Interface Units (BIU)

Provide four BIUs conforming to the requirements of section 8 of the NEMA TS2 Standard. Provide two BIUs with the main panel and one BIU with each of the detector racks.

C.12.6 Inductive Loop Detector Amplifier Card

Provide sixteen, two-channel, type C, rack mounted, inductive loop detector amplifier cards conforming to section 6.5, Inductive Loop Detector Units, of the NEMA TS2 Standard.

Install inductive loop detector amplifier cards in the rack in traffic signal control cabinet. Program the signal controller to make the inductive loop detector and signal cabinet fully operational per plan.

C.12.7 Time Clock

Furnish a Tork EWZ210C astronomical time clock with an 8-year lithium battery time backup,

-40° F to 120° F operating range, 40-year program schedule retention, LCD type, daylight saving time, and leap year correction. Program as required by the City of Madison.

C.13 NEMA TS2 Type 2 Traffic Signal Controller with Special Programming Functions

C.13.1 General Requirements

Provide a shelf-mounted NEMA TS2 Type 2 Cobalt EOS traffic signal controller programmed and ready for operation within the associated traffic signal control cabinet. The controller unit shall be fully actuated, solid state, digital microprocessor based capable of providing the number and sequence of phases, overlaps, and any special logic as described herein. The controller unit and engine board shall comply with or exceed the industry's latest Advanced Traffic Controller (ATC) standard 5.2b and proposed standard 6.10. The controller unit shall also conform to NEMA TS2 Standard, Section 3, specifications for the Type 1 Actuated configuration in the areas where the ATC standard is silent.

The traffic signal controller shall have the capability to be programmed for MUTCD allowed signal sequences and non-standard operations using inputs on the front panel without requiring revisions to the operating system and the controller application software. Controller unit shall have a Linux-based operating system.

Provide intersection controller units with up to 16-phase operation plus 16 programmable overlaps regardless of whether or not preemption, coordination, or other special programming is used.

Provide a four-ring, programmable both for single and dual entry concurrent timing, nine-phase frame or equivalent. Provide volume density timing for eight phases and pedestrian timing for all phases. Provide MUTCD flash capability. All controls shall be according to the NEMA TS2 Standard.

All controller timing parameters shall be fully programmable from the front panel keyboard inputs, and memory storage features shall be non-volatile under power-off conditions for at least thirty days. The locking, non-locking detection mode and per phase recall shall also be accessible on the front panel. The controller shall have the option for a security code entry before any timing parameters can be changed.

Provide a data key port and/or a USB port on the controller to load and store intersection programming.

Internally buffer all logic circuit inputs to withstand transients and noise, such as might result from normal usage, without damage to any mechanism components.

The controller shall provide a method for programming special user created logic functions. User created logic functions shall include, but not be limited to: nonstandard overlaps, special detector logic based on user selected parameters, coordination plan selection, and phase and pedestrian omits. Programming these special functions shall be accomplished through the use of the controller front panel keyboard. The need for special programming applications will not be considered acceptable; however, it is acceptable to provide the programming functionality as part of a computer based controller programming application. Special user created logic functions shall be stored as intersection programming and be capable of being transferred from controller to controller through the use of a data-key or computer based controller programming application.

C.13.2 Front Panel Display

Provide a display panel on the front panel consisting of a backlit alphanumeric LCD display. The face of the display shall be scratch, chemical, and solvent resistant. The operator shall access the controller through a menu system. By selecting various menu options, real time operational status or stored parameter tables shall be presented to the operator.

Show on the LCD display, in addition to information required elsewhere:

- a. The status of each signal phase on
- b. The interval status
- c. Phase termination information
- d. The presence of vehicular and pedestrian calls for each phase

C.13.3 Timing

The passage timer shall time concurrently with the minimum green timer, such that the duration of the minimum green time is directly adjustable and is independent of the passage time setting.

In the dual-ring application, no more than two phases shall be permitted to time concurrently, and no more than one phase per ring. Provide barrier protection against concurrent timing of two conflicting phases; no phases assigned to one side of the barrier shall be permitted to time concurrently, if a conflict will occur. Service calls on a single entry basis. Both rings shall cross the barrier simultaneously according to the following logic:

- Phases timing concurrently shall terminate simultaneously if both have a gap-out due to excessive time between actuations.
- Phases timing concurrently shall terminate simultaneously if both have a maximum timeout.
- Phases timing concurrently shall terminate simultaneously if one has a gap-out and the other has a maximum time-out.
- In the event that one phase has not achieved a gap-out or maximum time-out, the other gapped-out phase shall be permitted to leave the gapped-out condition and retime an extension when an actuation is received.

Controllers shall not accept any operator input or stored timing parameters that would result in intervals shorter than the following:

- yellow clearance 3.0 seconds
- standard minimum walk 4.0 seconds
- preemption minimum walk = 0.0 seconds
- minimum pedestrian clearance 6.0 seconds

At the beginning of each of the above intervals, the controller shall check the previously stored data against these minimums. If an operator attempts to load an incorrect timing parameter the controller unit shall output a unique error code on the front panel display. As an alternate to minimum timing control a coded keyboard entry security feature may be provided.

C.13.4 Manual (Police) Control

If manual control is used, actuation of the manual control shall permit manual advance of the Walk, Pedestrian Clearance, and Green interval terminations only. Manual termination of Yellow or All-Red clearance intervals shall not be permitted.

C.13.5 Coordination

The controller shall be capable of operation in progressive coordination systems and mutual coordination and shall contain, but not be limited to, the following external inputs, with all functions brought out:

- Vehicle/Pedestrian Detectors (per phase)
- Pedestrian Omit (per phase)
- Phase Omit (per phase)
- Hold (per phase)
- Omit Red Clearance (per ring)
- Internal Maximum Inhibit (per ring)
- Maximum II (per ring)
- Red Rest (per ring)
- Stop Timing (per ring)
- Force-Off (per ring)
- Select Minimum Recall (per controller)
- Manual Control (per controller)
- Semi-Modes (per controller)
- External Start (per controller)
- Transit Signal Priority via centralized system inputs

C.13.6 Diagnostic Program

Provide a diagnostic program prepared by the manufacturer of the controller unit which will demonstrate the proper operation of all of the inputs, outputs, controls and indicators in the controller, and have visual confirmation on the front panel. The diagnostic program shall be resident in each controller. The controller shall continuously run a diagnostic routine in the background to assure unit integrity.

C.13.7 Message Logging

Provide user programmable, data logging of local events or alarm events including, but not limited to: Conflict Flash, Remote Flash, Local Flash, Controller Voltage Monitor, Detector Failure, On Line and Data Change. The time and date shall be recorded as a part of the message logged. The logging function shall be resident in the controller unit. The logging function shall be viewed from the front panel LCD display. If the logging function cannot be viewed from the front panel LCD display, it shall be performed by supplemental auxiliary equipment supplied with this specification.

C.13.8 Closed Loop Operation

The controller shall be able to be used in a closed loop system using twisted pair copper, single mode fiber, multimode fiber, cellular modem, or wireless radio to connect to compatible equipment.

C.13.9 Firmware/Software

Provide installed in the controller current, fully operational, NTCIP compliant and active controller firmware and software sufficient for the controller to perform all functions shown on the plans, sequence of operation plan sheet, specifications, and signal timing plan for the local intersection. Provide all software licenses.

The firmware and software shall be compatible with and able to fully communicate with:

- a. All phase sequences used by the city, including flashing yellow for both left and right turns.
- b. Closed loop, adaptive, Performance Measure application, and on-street control software currently utilized by the city including Centracs and Centracs Adaptive.
- c. Both the controller and the MMU2.
- d. City PC laptop and desktop computers with Windows 7 operating systems.
- e. Backwards compatibility with older traffic signal controllers and software produced by the controller manufacturer and installed at city traffic signal installations since 2010.
- f. Capable of SPaT ouput for Connected Vehicle operations.

C.13.10 Controller Programming

Provide a controller that has been programmed to operate the associated intersection based upon the signal plan and sequence of operations sheet or as provided by the City.

C.14 Malfunction Management Unit (MMU)

Furnish equipment conforming to NEMA TS2 Standard, including NEMA Amendment #4-2012 for Flashing Yellow Arrow (MMU2), except where modified in this specification. Provide one shelf-mountable, 16 channel, solid-state MMU2 complete with programmed card and with Ethernet capability. The MMU2 shall meet the requirements of Section 4 of the NEMA TS2 Standard as well as Amendment #4-2012 for Flashing Yellow Arrow. The MMU2 shall be provided with Ethernet active and available for use without any further modification. The MMU2 shall come with a card that has been programmed per the sequence of operations.

The MMU2 shall be capable of the following:

- Detecting simultaneously active inputs of Green (Walk), Yellow, or Red (Don't Walk) on the same channel.
- Determining if the field signal input states detected as active or inactive by the MMU2 correspond with the data provided by the Controller Unit.
- Monitoring an optional external watchdog output from a Controller Unit or other external cabinet device.
- Monitoring an intersection with up to four approaches using the Flashing Yellow Arrow (for protected/permissive left and right turn movements).
- Event logging for the following; AC Line log, Prior/Previous Faults log, and Monitor Reset Log. All log entries shall include a date and time stamp.

- All monitor functions shall be capable of being programmed through the front panel, without the need for computers or special program cards.
- A built-in Diagnostic Wizard shall be provided that displays detailed diagnostic information regarding the fault being analyzed. This mode shall provide a concise view of the signal states involved in the fault, pinpoint faulty signal inputs, and provide guidance on how the technician should isolate the cause of the malfunction.

The MMU2 shall have an LCD display that allows for viewing of log files and field indications, as well as the viewing and setting of date and time and configuration parameters.

Furnish test results for the MMU2 showing that it has been tested within the past 3 months. The testing should include all standard NEMA TS2 required and optional tests – including flashing yellow arrow testing for the mode appropriate for the cabinet for which it is to be installed.

C.15 Documentation

C.15.1 Cabinet Intersection Wiring Diagrams

At the time of the cabinet delivery, furnish with the cabinet two sets of printed 22x34-inch cabinet intersection wiring diagrams, one set of .dwg CAD files and one .pdf file per cabinet. After cabinet acceptance is complete, if any cabinet wiring changes were made, revise the cabinet wiring diagrams and provide two sets of printed 22x34-inch and two sets of printed cabinet intersection wiring diagrams, one set of .dwg CAD files and one .pdf file reflecting any field changes.

C.15.2 Manuals

At the time of the cabinet delivery, furnish the City an electronic copy of installation, operations, and maintenance manuals including each type of standard equipment in the cabinet. The manuals shall as a minimum include the following information:

- table of contents.
- operating procedure,
- step-by-step maintenance and trouble-shooting information for the entire assembly,
- schematic diagrams,
- pictorial diagrams of parts locations,
- itemized parts lists with parts numbers,
- theory of operation, and
- maintenance checklists.

The itemized parts lists shall include the manufacturer's name and parts number for all components (such as IC, diodes, switches, relays, etc.) used. The list shall include cross references to parts numbers of other manufacturers who make the same replacement parts.

C.16 Cabinet Delivery

Deliver the fully wired, equipped and configured cabinet with required documentation to the City of Madison, Traffic Engineering Electrical Shop located at 1120 Sayle Street, Madison, WI, 53704. Delivery shall be on a business day between 8:00 AM and 3:00 PM. Contact the City of Madison, Traffic Engineering Electrical Shop (Ed Smith at (608) 266-9034) a minimum of two business days ahead of the desired delivery time to schedule and confirm the staff availability for delivery.

C.17 Warranty

The contractor shall warrant the performance and construction of the fully-configured cabinet to meet the requirements of the plan, this specification, and shall warrant all wiring parts, components, and appurtenances against defects in design, material and workmanship for a period of one year from the date of installation. In the event defects and failures become apparent during this time, the contractor shall repair and/or replace all defective parts or appurtenances at no additional expense to the city. This specification is to construe that any part, or parts, that fail to function properly shall be replaced at no charge to the city.

D Construction

The contractor shall coordinate picking up the fully configured and tested traffic signal control cabinet and controller from the City of Madison shop 24-hours prior to installing the contractor installing the cabinet in the field.

Pick up, transport, and install the cabinet to the intersection as specified in the plans, and including connecting all wiring to the cabinet.

Coordinate an in place test of the cabinet, EVP, and all indications and inputs prior to the City of Madison accepting this item.

E Measurement

The department will measure NEMA TS2 Type 1 Traffic Signal Control Cabinet as each individual traffic signal control cabinet, acceptably completed.

F Payment

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

 ITEM NUMBER
 DESCRIPTION
 UNIT

 SPV.0060.40
 NEMA TS2 Type 1 Traffic Signal Control Cabinet
 EACH

Payment is full compensation for furnishing and delivering all materials including traffic signal controller to the City of Madison Traffic Engineering Shop, 1120 Sayle Street for configuration, transporting all material from the City of Madison to the project site for installation, installation of the cabinet including all necessary materials to complete the installation, and disposal of any excess materials.

80. Traffic Signal Ethernet Switch, Item SPV.0060.41.

A Description

This special provision describes furnishing and installing an ethernet switch in an existing traffic signal cabinet, as specified in standard spec 651, 655, 670, 674, and 675, as shown on the plans, and as provided hereinafter.

B Materials

Furnish Cisco IE-2000-8TC-G-L Ethernet switches as shown in the plans. Provide all necessary cables between the ethernet switch and device or devices as shown in the plans.

C Construction

Install the traffic signal ethernet switch in an existing traffic signal cabinet. Connect it to devices as shown on the plans, according to the manufacturer's recommendation, and as directed by the engineer.

Contact Mike Christoph at the City of Madison Traffic Engineering shop at (608) 266-9031 a minimum of 7 working days in advance to coordinate installing equipment in existing traffic signal cabinet.

D Measurement

The department will measure Traffic Signal Ethernet Switch as each individual traffic signal ethernet switch, 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.0060.41

Traffic Signal Ethernet Switch

EACH

Payment is full compensation for furnishing and installing an ethernet switch, all necessary incidental wiring and hardware, making all necessary connections.

81. Pedestal Base, Black, Item SPV.0060.42;

A Description

This special provision describes furnishing and installing Pedestal Bases (BLACK) as shown on the plans and as follows.

B Coatings

Confer with Jerry Schippa of City Traffic Engineering, (608) 267-1969, as to the specifications for a black anodized finish in order to assure the city that the city's desires are being fulfilled. Provide a uniform finish appearance free from any streaking during the anodizing. Use a two-step matte black anodizing finish (AA-C22-A44-Black) or an alternate process which produces a dark black finish. A light black finish is not acceptable.

C Construction

Install transformer bases according to the manufacturer's instructions, and as shown on the plans.

D Measurement

The department will measure Pedestal Base (Black) 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.0060.42

Pedestal Base, Black

EACH

Payment is full compensation furnishing and installing transformer bases, streetlight pole wire, mechanical grounding connector and related hardware; for leveling shims when required.

82. Traffic Signal Trombone Arms Aluminum 12-Foot, Item SPV.0060.43; Traffic Signal Trombone Arms Aluminum 18-Foot, Item SPV.0060.44; Traffic Signal Trombone Arms Aluminum 22-Foot, Item SPV.0060.45.

A Description

This special provision describes furnishing and installing trombone mast arms and all necessary miscellaneous hardware needed to complete the installation of the trombone mast arm as shown on the plans, in the standard specifications, and as hereinafter provided.

B Material

Furnish traffic signal trombone arms designed to withstand loadings resulting from a 12" 3-section aluminum signal with backplate and an 18" x 90" aluminum street name sign mounted on the arm as shown on the drawing. Design factors according to the AASHTO Specifications for the Design and Construction of Structural Supports for Traffic Signals, Signs, and Highway Lighting, together with a wind pressure resulting from a wind velocity of 80 miles per hour plus gust factor, shall be applied to these arms, with the above signals attached.

Furnish certification of compliance with these stated AASHTO performance requirements with submission of the material list.

Submit shop drawings that include dimensions of width, depth, length and thickness of all members and ASTM designation and alloy designation of aluminum members.

Construct trombone arms of aluminum consisting of round or oval upper and lower members joined by one or more tubular vertical struts welded to them. Construct the pole end of the mast arm with a mounting clamp welded to it which will permit the attachment of the mast arm to a round pole of varying diameter. Construct the lower clamp to be 5-7/8" I.D. and the upper clamp to be 5-I/2" I.D. Design the clamps to accommodate some variation in pole diameter while still attaining full contact between the clamp and the pole. The surface area of the clamp contacting the pole shall be sufficiently large and designed to prevent horizontal rotation in windy conditions. Provide bolts connecting the arm bracket to the back bracket from galvanized steel; stainless steel bolts are not acceptable. Design the vertical strut, which has provision for mounting the signal head, to provide for horizontal adjustability along the main mast arm members so that signal heads of various lengths with backplates, up to and including 5-section 12" heads, can be accommodated within the confines of the mast arm. Design the cross tees for signal heads to have two slots on the threaded hubs that face each other.

Provide the wiring raceway entrance to be through the lower mounting bracket.

Provide the mast arm with a uniform natural aluminum finish and clean. No painting or other corrosion preventive maintenance will be required.

Construct the portion of the main members of the arm to which the arm attachment bands are welded as one piece of seamless tapered aluminum tubes.

Attach the main arm member to the pole using extruded aluminum clamps fastened with continuously threaded stainless steel bolts with nuts and washers meeting the

requirements of ASTM Designation A-320. List the strength and/or grade specification ratings on the shop drawings. Provide stiffeners or gussets at the joints between the main arm tubes and arm clamps to provide adequate strength to resist side loads.

Provide shims made of an aluminum alloy.

Provide a permanent imprint of the "Type" and "Year of Manufacture" on the under side of the lower member of each arm.

B.1 Trombone Arm Coatings

Confer with Jerry Schippa of City Traffic Engineering, (608) 267-1969, as to the specifications for a black anodized finish in order to assure the city that the city's desires are being fulfilled. Spin the trombone arms using a fine (120) grit. Provide a uniform finish appearance free from any streaking during the pole extrusion, spinning and anodizing. Use a two-step matte black anodizing finish (AA-C22-A44-Black) or an alternate process which produces a dark black finish. A light black finish is not acceptable.

C (Vacant)

D Measurement

The department will measure Traffic Signal Trombone Arm Aluminum 18-Foot by each individual unit, acceptably completed.

E Payment

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

•	' '	•	
ITEM NUMBER	DESCRIPTION		UNIT
SPV.0060.43	Traffic Signal Trombone Arms Alumine	um 12-Foot	EACH
SPV.0060.44	Traffic Signal Trombone Arms Alumine	um 18-Foot	EACH
SPV.0060.45	Traffic Signal Trombone Arms Alumini	um 22-Foot	EACH

Payment is full compensation furnishing and installing all materials including all hardware, fittings, mounting clamps, shims and attachments necessary to completely install the mast arms.

83. Traffic Signal Heads 12-Inch, 3-Section, Item SPV.0060.46;

Traffic Signal Heads 12-Inch, 4-Section, Item SPV.0060.47;

Traffic Signal Heads 12-Inch, 5-Section, Item SPV.0060.48;

Traffic Signal Heads 16-Inch Pedestrian with Countdown, Item SPV.0060.49.

A Description

This special provision describes furnishing and installing vehicle and pedestrian signals with LED indications according to the standard specifications and these special provisions.

B Materials

Furnish circular and arrow LED modules from the departments approved product list and conforming to ITE VTCSH-LED.

Furnish state approved 16-Inch Pedestrian LED Full Hand/Full Man Overlay Module with Countdown conforming to ITE VTCSH-LED.

Provide all pedestrian signals with tunnel visors in place of z-grate specified by WisDOT.

Provide all vehicle signals with cutaway visors.

Provide snow-shedding shield on each signal indication on all signals mounted on monotube arms or trombone arms. The shield shall be impact resistant polycarbonate, designed and installed specifically to reduce snow accumulation, while not allowing water to enter or reside in the signal unit. If there are not any far side signals on monotube arms or trombone arms, then install snow-shedding shields on each signal indication of the far right signal.

Pedestrian countdown timers shall have a control wire so that when 120V AC current is applied, the timer will immediately go dark. This control wire shall be wired back to the signal control cabinet.

Make all vehicle and pedestrian signal heads with polycarbonate material, UV stabilized, with color impregnated in the material. All features and performance shall meet the requirements outlined in the latest revision of the Institute of Transportation Engineers' publication, "Adjustable Face Vehicular Traffic Control Signal Heads" The front face, all visors (inside and outside), and other exterior parts shall be flat or semi-gloss black.

Use only exterior hardware made of stainless steel.

All vehicle and pedestrian signal heads shall have black housings.

C Construction

Construct according to standard spec 658.

D Measurement

The department will measure Traffic Signal Heads (Type) as each individual traffic signal heads (type), acceptably completed.

E Payment

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

		-	
ITEM NUMBER DESCRIPTION		L	JNIT
SPV.0060.46 Traffic Signal Heads 12-I	nch, 3-Section	E	ACH
SPV.0060.47 Traffic Signal Heads 12-I	nch, 4-Section	Е	ACH
SPV.0060.48 Traffic Signal Heads 12-I	nch, 5-Section	E	ACH
SPV.0060.49 Traffic Signal Heads 16-I	nch, Pedestrian with Countdown	E	ACH

Payment is full compensation for furnishing and installing all materials, and for furnishing all equipment and incidentals necessary to complete the work.

84. Backplates Signal Face, 3-Section 12-Inch, Item SPV.0060.50; Backplates Signal Face, 4-Section 12-Inch, Item SPV.0060.51; Backplates Signal Face, 5-Section 12-Inch, Item SPV.0060.52.

A Description

This special provision describes furnishing and installing backplates for signal faces.

B Materials

Furnish Backplates Signal Face (Size) that are according to the pertinent requirements of standard spec 658 and these special provisions.

Provide a 5" wide black band around the signal head backplates for 12" signal heads. Make the backplates with an approved black rigid material, such as vacuum formed ABS plastic. Match the backplates to the signal heads being furnished under this bid, equipped with all necessary holes, mounting devices. Use only stainless steel mounting hardware.

C Construction

Install the backplates according to standard spec 658.3, the manufacturer's instructions, and as shown on the plans.

D Measurement

The department will measure Backplates Signal Face (Description) 12-Inch by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.50	Backplates Signal Face, 3-Section 12-Inch	EACH
SPV.0060.51	Backplates Signal Face, 4-Section 12-Inch	EACH
SPV.0060.52	Backplates Signal Face, 5-Section 12-Inch	EACH

Payment is full compensation furnishing and installing all materials including all hardware.

85. Remove Base Type 10, Item SPV.0060.56.

A Description

This special provision describes removing either all or the top portion of the existing base enough to allow room for the required depth of new facilities above the base. Depth may vary due to field conditions.

B (Vacant)

C Construction

Remove and dispose of top portion of concrete and reinforcing steel to the field inspector's satisfaction.

D Measurement

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.56Remove Base Type 10EACH

Payment is full compensation for removals, salvaging and disposal as required above.

86. Remove Sanitary Sewer Access Structure, Item SPV.0060.57.

A Description

This special provision describes removing sanitary sewer access structures as shown on the plans. The work includes salvaging and disposing of the resulting materials and backfilling the trenches with select fill.

B Materials

Provide select fill meeting the requirements of Article 202.2 of the City of Madison Standard Specifications for Public Works Construction - Current Edition; furnishing and placing select fill in void created by the structure removal is included with this bid item.

C Construction

Remove sanitary sewer access structures according to Article 203.2(a) of the City of Madison Standard Specifications for Public Works Construction - Current Edition. Sewer mains and laterals that are connected to a removed Sanitary Sewer Access Structure will be plugged with a concrete plug incidental to the removal of the structure.

D Measurement

The department will measure Remove Sanitary Sewer Structure 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.0060.57
 Remove Sewer Access Structure
 EACH

Payment is full compensation for furnishing all materials, including fill material; for disposal of surplus materials; excavation and compaction of select fill material; andrestoring the site.

87. Abandon Sanitary Sewer Access Structure, Item SPV.0060.58.

A Description

This work consists of abandoning sanitary sewer access structure as shown in the plans and hereinafter provided.

B Materials

Provide select fill meeting the requirements of Article 203.2(e) of the City Standard Specifications; furnishing and placing select fill in the void created by the structure abandonment is included with this bid item.

C Construction

Abandon the sanitary sewer access structures according to Article 203.2(c) of the City Standard Specifications. Plug sewer mains that are connected to an abandoned sanitary sewer access structure with a concrete plug paid for by separately under Abandon Sanitary Sewer–Pipe Plug. Concrete slurring of an entire sewer main will be paid for separately under Abandon Sanitary Sewer–Slurry.

D Measurement

The department will measure Abandon Sanitary Sewer Access Structure as each individual abandon sanitary sewer access structure, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.58Abandon Sanitary Sewer Access StructureEACH

Payment is full compensation for furnishing all materials, including fill material; for disposal of surplus materials; excavation and compaction of select fill material; restoring the site.

88. Sanitary Sewer Access Structure, 4-Foot Diameter, Item SPV.0060.59; Sanitary Sewer Access Structure, 5-Foot Diameter, Item SPV.0060.60.

A Description

This special provision describes installing Sewer Access Structures at the depths and locations shown on the plan.

B Materials

Provide precast concrete Sanitary Sewer Access Structure (4-Foot Diameter, 5-Foot Diameter) meeting the requirements of Standard Detail Drawing 5.7.2, 5.7.15, and Article 507.3 of the City of Madison Standard Specifications for Public Works Construction – Current Edition.

Furnish and install Sewer Access Structure Frames and Covers, according to Standard Detail Drawing 5.7.16 of the City of Madison Standard Specifications for Public Works Construction – Current Edition, will be paid for separately under the Manhole Covers Type J Special.

C Construction

Install Sanitary Sewer Access Structure (4-Foot Diameter, 5-Foot Diameter) according to Article 507.3 of the City of Madison Standard Specifications for Public Works Construction – Current Edition. Maintain the normal flow of wastewater at all times during installation of the new sanitary sewer access structure and when connecting pipes to the new structure. All bypass pumping, temporary piping, and/or temporary connections, which are required to maintain the normal flow of wastewater throughout construction, is incidental to this bid item.

Construct concrete benches and flow lines as directed by the City of Madison or as directed by the engineer.

D Measurement

The department will measure Sanitary Sewer Access Structure (4-Foot Diameter, 5-Foot Diameter) by each unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.59	Sanitary Sewer Access Structure (4-Foot Diameter)	EACH
SPV.0060.60	Sanitary Sewer Access Structure (5-Foot Diameter)	EACH

Payment is full compensation for furnishing and installing sewer access structures; for excavation and disposal of excess material; for constructing benches and flow lines; for furnishing and installing all bypass or temporary piping and connections; and for backfilling.

89. Sanitary Sewer Tap, Item SPV.0060.61.

A Description

This special provision describes connecting new laterals or main to an existing structure and connecting an existing lateral or main to a new structure.

B Materials

Provide Kor-n-Seal flexible connector, or approved equal, in the tapped hole, according to Standard Detail Drawing 5.7.31 of the City of Madison Standard Specifications for Public Works Construction-Current Edition.

C Construction

C.1 New Pipe to Existing Structure

Use a portable coring drill to produce a pipe opening that is round, clean and free of any pitting of the concrete.

Make a watertight connection of the pipe to the sewer access structure with a Kor-n-Seal-flexible connector, or approved equal, according to Standard Detail Drawing 5.7.31 of the City of Madison Standard Specifications for Public Works Construction - Current Edition.

C.2 Existing Pipe to New Structure

Provide a flexible connector to connect the existing pipe to any new pipe which is required to make the connection to the structure.

Provide PVC (SDR-26 or SDR-35) that matches the existing pipe's diameter, or the next larger diameter, to reconnect the existing sewer main or lateral. The PVC (SDR-26 or SDR-35) sanitary sewer pipe is considered incidental to this bid item.

The pouring and construction of concrete benches and flowlines in new sewer access structures for the inlet or outlet pipes is not included in this bid item and is considered incidental to the bid item Sanitary Sewer Access Structure (4-Foot Diameter or 5- Foot Diameter).

The downstream pipe connection to a Sewer Access Structure (4-Foot Diameter or 5- Foot Diameter) is considered incidental to the Sewer Access Structure (4-Foot Diameter or 5-Foot Diameter).

D Measurement

The department will measure Sanitary Sewer Tap 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 NUMBERDESCRIPTIONUNITSPV.0060.61Sanitary Sewer TapEACH

Payment is full compensation for providing all connectors; for coring; and for furnishing all work, materials, labor and incidentals required to complete the work.

90. Sewer Electronic Markers, Item SPV.0060.62.

A Description

This special provision describes installing Sewer Electronic Markers according to Article 503.2 of the City of Madison Standard Specification for Public Works Construction- Current Addition. These sewer electronic markers will be installed where called for on the plan set above sanitary sewer and storm sewer facilities.

B Materials

All materials are described in Article 503.2(f) of the City of Madison Standard Specification for Public Works Construction- Current Addition. Markers will be provided by the City of Madison.

C Construction

Install Sewer Electronic Markers (sanitary) according to Article 503.2(f) of the Standard Specifications for Public Works Construction— Current Edition.

For storm sewer, place a marker ball for each storm tap located above the connection on the storm sewer main, as shown on plans. Place the marker ball so the marker ball will be no deeper that 4.5-feet below finished grade and directly above the storm lateral. If the location of the lateral is below 4.5 feet from finished grade, partially backfill trenches prior to placement of the marker ball at the desired locations.

Notify the engineer when marker balls are installed. Each marker ball will be tested by the city after completion of final pavement surface to confirm that it is installed and functioning properly. If it is not installed or functioning, excavate to expose the existing marker ball or lateral and place a new marker ball. No additional compensation will be provided for this work.

D Measurement

The department will measure Sewer Electronic Markers be 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.0060.62 Sewer Electronic Markers EACH

Payment is full compensation for furnishing all work, materials, labor and incidentals required to complete the installation and all associated work to provide a complete functioning system. The department will not pay for replacing those marker balls that are non-functional. Balls will be provided by the City of Madison.

91. Sanitary Sewer Internal Chimney Seal, Item SPV.0060.63.

A Description

Furnish and install an internal chimney seal on all sanitary sewer access structures located within 100 feet of a street low point, in greenways, and where indicated on the plan.

B Materials

Provide an internal chimney seal that consistss a low-density polyethylene insert, conforming to the Standard Detail Drawing 5.7.17–SAS Internal Chimney Seal of the City Standard Specifications, current edition or other equivalent chimney seal products as approved by the engineer.

C Construction

Install internal chimney seals according to the manufacturer's instructions.

D Measurement

The department will measure Sanitary Sewer Internal Chimney Seal as each individual sanitary sewer internal chimney seal, acceptably completed.

E Payment

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

 ITEM NUMBER
 DESCRIPTION
 UNIT

 SPV.0060.63
 Sanitary Sewer Internal Chimney Seal
 EACH

Payment is full compensation for the installation of the sanitary internal chimney seal.

92. External Sewer Access Structure Joint Seal, Item SPV.0060.64.

A Description

Furnish and install sealed barrel joints on all sanitary sewer structures around the outside circumference of the Sewer Access Structure.

B Materials

Provide barrel joint seals consisting of flexible rubberized seal conforming to ASTM C923 held in place with stainless steel compression bands or butyl adhesive tape conforming to ASTM C877 or heat shrink sleeve over visco-elastic adhesive sealant. Manhole joint seals shall be a minimum of 9 inches wide. Acceptable products and manufacturers are the following: 1. Mac Wrap, Mar Mac Manufacturing Company, Inc. 2. NPC External Joint Seal, NPC, Inc. 3. EZ-Wrap, Press-Seal Gasket Corporation 4. Riser-Wrap, Pipeline Seal and Insulator, or equal.

C Construction

Install sealed barrel joints according to the manufacturer's instructions.

D Measurement

The department will measure External Sewer Access Structure Joint Seal as each individual external sewer access structure joint seal, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.64External Sewer Access Structure Joint SealEACH

Payment is full compensation for the installation of the external sewer access structure joint seal.

93. Sanitary Lateral Reconnect, Item SPV.0060.65.

A Description

This special provision describes sanitary sewer lateral connections encountered during the course of this project that connect to the sanitary sewer main.

B Material

Furnish sanitary sewer pipe and fittings that are solid-wall Poly Vinyl Chloride (PVC) and that conform to the requirements of the Specification for PVC Sewer Pipe and Fittings, ASTM D 3034.

For lateral wye connections to 8" diameter sewer main, provide sanitary sewer pipe and fittings having a standard dimension ratio of 26 or 35 depending on the depth of the pipe.

Sewer lateral pipe and fittings deeper than 12' will have ASTM D3034 SDR 26 pipe.

Assemble joints using or elastomeric or solvent cement as recommended by the pipe manufacturer. The assembled joints will be required to pass the performance tests as required in ASTM D3212 elastomeric or ASTM D2564-solvent cement.

C Construction

The pipe for the connection of laterals is not to exceed a length of 5 feet.

Install risers, where necessary, according to Standard Detail Drawing 5.3.1 of the City of Madison Standard Specifications for Public Works Construction- Current Edition. Risers 5 feet in length are included in the bid item Sanitary Lateral Reconnect. Backfill and compaction according to Article 202.3(b) of the City of Madison Standard Specifications for Public Works Construction-Current Edition utilizing select fill.

D Measurement

The department will measure Sanitary Sewer Reconnect as each individual sanitary sewer reconnect, acceptably completed.

Sanitary sewer lateral pipe exceeding five feet in length will be paid under bid item. Sanitary Sewer Lateral, Item SPV.0090.20.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.65Sanitary Lateral ReconnectEACH

Payment is full compensation for furnishing all materials, including fill material; plugging the ends of all sewer mains and sewer laterals; excavation; trimming and chipping; cutting, protecting or removing reinforcing steel; disposal of surplus materials from the structure or excavation; excavation and compaction of the backfill material; and for restoring the site.

94. Adjusting Sanitary Sewer Manhole, Monona, Item SPV.0060.66.

A Description

This special provision describes adjusting existing sanitary manholes to final grade at the locations shown on the plans or as directed by the engineer.

B Materials

Provide precast concrete grade rings conforming to the requirements of Section 8.39.11 of the Standard Specifications for Sewer and Water Construction in Wisconsin, Current Edition.

Provide Internal/External Adaptor Seal by Adaptor Inc. The chimney seal shall have a minimum thickness of 3/16 inches and shall be extruded or molded from a high grade rubber compound conforming to the applicable requirements of ASTM C923, with a minimum 1,500 psi tensile strength, maximum 18 percent compression set and hardness (durometer) of 48±5. Chimney seal shall be doubled pleated with a minimum unexpanded vertical height of 8 inches and be capable of vertical expansion of not less than 2 inches when installed. Provide bands used for compressing the sleeve and extension against the manhole fabricated from 16 gauge stainless steel conforming to ASTM A240 Type 304. Provide stainless steel screws, bolts or nuts conforming to ASTM F-923 and 594, Type 304.

Provide frame and chimney sealant composed of butyl rubber caulk conforming to the requirements of AASHTO M-198 Type B.

Provide backfill as specified by the engineer meeting the requirements for aggregate base course material or crushed stone limestone chips meeting the requirements of Section 8.43.2, Table 32 of the Standard Specifications for Sewer and Water Construction in Wisconsin, Current Edition.

Submit to the engineer product literature and catalog cuts of the materials to be supplied, prior to incorporating any materials or products into the work. Submit information in sufficient detail to readily determine if these materials are in conformance with the specifications.

C Construction

Maintain access to all sanitary sewer manholes throughout utility and street reconstruction, including base course construction and pavement construction.

Unless contract provides otherwise, adjust existing cover, including frames and lids, to the required elevation. Remove the existing casting, adjust the top of the existing structure, and reinstall the casting unless otherwise noted on the plans or as directed by the city staff.

Remove existing chimney to cone section and install new chimney according to the applicable sections of the Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition.

Prevent debris from falling into manhole. Any debris which falls into the manhole shall be removed immediately.

Do not use bricks, stones, wood, nor pieces thereof to set rings.

Set each casting on the sanitary manhole structure in such a way so that the top of the casting is parallel to the new pavement. This is especially important on steep grades. Set the top surface of the manhole casting 1/8 inch to 1/4 inch below the finished pavement.

Use precompressed butyl gasket between the manhole, manhole casting and all adjustment rings. Mortar shall not be used between these structures for adjustment; however, mortar shall be used to provide a smooth trowel type finish to the interior surface of the joints between the manhole, adjusting rings and casting.

Install internal/external chimney seals per manufacturer's recommendations and prior to asphalt paving.

Extend chimney seal from the casting, down over the adjusting rings, to the manhole cone to provide a watertight seal from 2 inches above the bottom of the casting to 2 inches below the top of the manhole cone section or flat top.

D Measurement

The department will measure Adjust Sanitary Manhole by each unit, and the quantity measured for payment will be the number of existing individual manholes adjusted to finish grade according to the contract and accepted. Manhole adjustments required as a result of construction operations, and traffic staging shall not be measured for payment. All costs for maintaining access during constructions shall be merged into the costs for adjusting sanitary manholes to finish grade.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT

SPV.0060.66 Adjusting Sanitary Sewer Manhole, Monona EACH

Payment is full compensation for furnishing and installing all materials, including adjustment rings, internal/external chimney seal; excavation, removal and disposal; adjusting existing cover; backfilling; and for maintaining access during construction.

95. Abandon Sanitary Sewer – Pipe Plug, Item SPV.0060.67.

A Description

This work consists of plugging pipes as shown in the plans and hereinafter provided.

B Materials

Provide concrete conforming to Article 301 of the City Standard Specifications, current edition.

C Construction

Abandon sanitary sewer pipe with a plug according to Article 203 of the City Standard Specifications.

Provide replacement sanitary sewers and laterals or appropriate bypass pumping prior to abandoning sanitary sewer pipe.

Saw cut end of existing pipe and clean interior of pipe to create a good bonding surface. Form and pour a minimum 1-foot deep concrete plug completely filling the opening of the pipe.

Where structures are called out for removal or abandonment, plug pipes at the structure will be considered incidental to removal or abandonment of the manhole

Any plugs required to abandon the existing sanitary main where laterals are being extended will be considered incidental to sanitary sewer lateral bid item.

The department will measure Abandon Sanitary Sewer – Pipe Plug as each individual pipe plug, 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.0060.67 Abandon Sanitary Sewer – Pipe Plug EACH

Payment is full compensation for furnishing all materials, including fill material; for disposal of surplus materials; excavation and compaction of select fill material; restoring the site; and for furnishing all labor, tools equipment, and incidentals necessary to complete the contract work.

96. Reconstruct Bench and Flowlines, Sanitary Sewer, Item SPV.0060.68.

A Description

Work under this item includes the removal and replacement of the existing sewer access structure's bench and flowline(s) as indicated in the drawings, or as required by the City of Madison, to restore the bench and flow line after completion of a tap connection as described under Sanitary Sewer Tap bid item (Bid Item SPV.0060.54 Sanitary Sewer Tap).

B Materials

Furnish concrete materials according to the applicable provisions of standard spec 611.

C Construction

Notify the City of Madison of any potential restoration work and provide a minimum of three working days for completion of a field assessment of the structure in question. Unless shown on the drawings, do not reconstruct bench and flowlines unless directed by the City of Madison.

Complete all work associated with this item according to Article 503 of the City of Madison Standard Specifications for Public Works Construction - Latest Addition. Provide a smooth trowel finish to all completed flowlines. Brushed flowlines will not be accepted.

D Measurement

The department will measure Reconstruct Bench and Flowlines, Sanitary Sewer as each individual reconstruct bench and flowline, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT

SPV.0060.68 Reconstruct Bench and Flowlines, Sanitary Sewer EACH

Payment is full compensation for disposing of surplus materials.

97. Install Compression Coupling, Item SPV.0060.69.

A Description

This special provision describes a permanent sanitary sewer connection of the proposed sewer main to existing sanitary sewer main.

B Materials

Provide select fill meeting the requirements of Article 503.3(f) of the City of Madison

Standard Specifications for Public Works Construction – Latest Edition for select fill for sanitary sewer mains and laterals.

C Construction

Install Compression Couplings according to all applicable provisions of Article 503.3(f) of the City of Madison Standard Specifications for Public Works Construction – Latest Edition. If the compression coupling is a proposed sewer main to an existing sewer main, the pipe slope of the proposed sewer main will match the slope of the existing sewer pipe.

D Measurement

The department will measure Install Compression Coupling as each individual compression couplings installed, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT

SPV.0060.69 Install Compression Coupling EACH

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

98. Cut Off Existing Water Main, Item SPV.0060.70.

A Description

Abandon and plug a segment of existing water main by "cutting it off" from the active water system. The work also includes securely capping or plugging the cut end of the active main.

B Materials

Refer to Article 702 of the City Standard Specifications.

C Construction

Refer to Article 703 of the City Standard Specifications and this section.

Prior to proceeding with the cut-off, perform the required water main shut-off notifications.

When authorized to proceed, isolate and shut-off the existing water main.

Cut off the water main at the location designated for abandonment.

Install a concrete pipe plug in the end of the existing main which is to be abandoned.

On the end of the water main which is to remain in-service:

- 1. Install a restrained mechanical joint cap over the cut end of the existing water main, or within 2-feet of a fitting or live-tap.
- 2. Otherwise, install a restrained mechanical joint plug fitting into a new or existing fitting located at the end of the main.

If the water main cut off work is intended to remove and replace an existing fitting, valve, or segment of pipe, cut off as designated, remove the existing material and replace it with the new fittings and/or the lengths of pipe and solid sleeves necessary to reconnect to the existing main.

Disinfect any associated materials by swabbing methods according to Article 703 of the *City Standard Specifications*.

D Measurement

The department will measure Cut Off Existing Water Main by each individual unit, acceptably completed.

E Payment

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

 ITEM NUMBER
 DESCRIPTION
 UNIT

 SPV.0060.70
 Cut Off Existing Water Main
 EACH

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

99. Cut-In or Connect-To Existing Water System, Item SPV.0060.71.

A Description

Cut-In Connection consists of all means and methods, equipment, tools, labor, and incidentals necessary for making a plug-removal connection or a cut-in connection to existing water mains, including any necessary water-tight capping of existing water mains associated with the work.

B Materials

Refer to Article 702 of the City Standard Specifications.

C Construction

Refer to Article 703 of the City Standard Specifications and this section.

Excavate and expose the existing water main to a point 18-inches below the bottom of the pipe at the proposed location of the plug-removal connection or cut-in connection.

Shut off all valves required to isolate the exposed pipe segment. Be responsible and properly equipped for valve-turning at all times while doing such work.

Place a water pump at the bottom of the excavation for dewatering, as needed. When cutting out sections of pipe proceed slowly and ensure dewatering efforts prevent the water level within the excavation from rising above the invert elevation of the exposed pipe.

Before placing new pipe and fittings on the exposed end of the existing fitting or the cut-off end of the existing pipe, disinfect the new fitting or valve by swabbing or soaking thoroughly with a 10:1 (water:bleach) solution.

Fasten new fittings to existing fittings or ductile iron pipes as described in Article 703 of the *City Standard Specifications*. For connections to existing cast iron or other existing pipe materials, secure the new pipe or fitting with threaded rods according to the Standard Detail Drawings.

Any required fittings, pipe, solid sleeves or repair clamps required along the run of existing water main to perform the cut in connection, up to a distance of 10-feet, is considered incidental to making the cut in connection.

- Payment for pipe and fittings along the run of existing water main will only be considered when the plans require existing main replacement along the run of existing main exceeding 10- feet in length, or if directed by the engineer to replace additional existing main during construction.
- 2. Valve connections remain eligible for separate valve installation payment under standard spec 704.6

All cut-in connections and tee branch connections require concrete thrust restraint in addition to mechanical joint restraint. See Article 703 and the Standard Detail Drawings for concrete thrust restraint requirements.

For cut-in connections or as otherwise necessary, secure the disconnected end of the existing pipe with either a pipe plug or a cap fitting, as approved by the engineer. Place standard thrust blocking between the end of the existing pipe and the new fitting, unless specified otherwise in the Contract Documents or as directed by the engineer.

D Measurement

The department will measure Cut-In or Connect-To Existing Water System by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT

SPV.0060.71 Cut-In or Connect-To Existing Water System EACH

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

100. Abandon Water Valve Box, Item SPV.0060.72.

A Description

Abandon valve boxes within the project limits that are set upon valves no longer in service. Place the abandoned valve in the closed position prior to abandoning the box. Completely remove the valve box whenever possible.

B Materials

Refer to Article 702 of the City Standard Specifications.

C Construction

Refer to Article 703 the City Standard Specifications and this section.

Proceed with work only after the existing water main has been abandoned.

Remove the top casting of the valve box to a point at least 3-feet below the final elevation, and then backfill the opening.

Any associated surface restoration work, including concrete or asphalt surface restoration, necessary as a result of the valve box abandonment being located beyond surfaces called to be replaced is considered incidental to this work.

D Measurement

The department will measure Abandon Water Valve Box by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT

SPV.0060.72 Abandon Water Valve Box EACH

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

101. Abandon Water Valve Access Structure, Item SPV.0060.73.

A Description

Abandon all water valve access structures or manholes as indicated on the drawings or ordered by the engineer.

B Materials

Refer to Article 702 of the City Standard Specifications.

C Construction

Refer to Article 703 the City Standard Specifications and this section.

Remove the casting and structure walls. If concrete is in contact with a main and/or valve that is to remain in service, and removal of the structure may damage the existing piping system, the engineer may instead require that the structure walls be removed to a depth of 3-feet below finished grade.

Install a new water valve and box at the location of the removed water valve access structure.

D Measurement

The department will measure Abandon Water Valve Access Structure by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT

SPV.0060.73 Abandon Water Valve Access Structure EACH

Payment is full compensation for all materials, including valve box, backfill.

102. Remove and Salvage Existing Hydrant, Item SPV.0060.74.

A Description

This special provision describes removing and salvaging existing hydrants according to section 704.7 of the City of Madison Standard Specifications. Store the hydrants off the project site for the City of Madison pickup. Coordinate with the City of Madison Water Utility inspector to coordinate pick up.

B Materials

Furnish associated materials according to Article 702.4 of the City of Madison Standard Specifications.

C Construction

Salvage hydrants according to section 704.7.3 (19) of the City of Madison Standard Specifications, unless otherwise shown or specified.

D Measurement

The department will measure Remove and Salvage Hydrant 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 NUMBERDESCRIPTIONUNITSPV.0060.74Remove and Salvage Existing HydrantEACH

Payment is full compensation for excavating, backfilling, and for disassembling. Removing, and salvaging existing hydrants including disposal of any materials and storage.

103. Adjust Water Valve Box Section, Item SPV.0060.75

A Description

Work under this item may include a combination of the following:

- (1) Adjust existing water valve boxes to ½-inch below finished grade.
- (2) In addition to the work described in (1), furnish and install a new water valve box top casting and lid where the engineer determines existing valve box top section is damaged or non-functioning.
- (3) In addition to the work described in (1) and (2), furnish and install a new lower valve box section(s) where the engineer determines existing lower valve box sections to be damaged or non-functioning.
- (4) If full replacement of existing valve box is required, perform the replacement installation according to Section 704.6 'Furnish & Install Water Valve.'

B Materials

Provide all materials according to section 702 and 704 of the City Standard Specifications.

C Construction

Perform all work according to section 702, 703 and 704 of the City Standard Specifications. If the engineer determines that an existing valve box is in acceptable overall condition and alignment, adjust the existing valve box to a depth at finished grade within appropriate tolerances.

If the engineer determines that an existing valve box is improperly aligned or otherwise damaged and unacceptable, excavate and expose the existing water valve box to the depth needed to install a new top casting with a new lid, center the valve box over the operating nut and adjust the valve boxes to finished grade.

If the engineer determines that the entire existing valve box is unacceptable, excavate, remove and replace the bottom section of the valve box in addition to the work described above. Extensions or replacement valve box materials may be required and will be paid as listed below.

Ensure that all adjusted valve boxes are centered over the valve operating nut and free of dirt and debris when complete.

Compaction around valve boxes shall be according to Article 703 "Backfilling and Compaction" and this section.

D Measurement

The department will measure Adjust Water Valve Box Section by each box location, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.75Adjust Water Valve Box SectionEACH

Payment is full compensation for all work adjusting the water valve box as specified herein.

104. Furnish & Install 6-Inch Valve, Item SPV.0060.76; Furnish & Install 8-Inch Valve, Item SPV.0060.77;

Furnish & Install 10-Inch Valve, Item SPV.0060.78.

A Description

Furnish and install water main valves and associated accessories. Work for this item also includes, but is not limited to:

- 1. Mechanical joint restraint.
- 2. Valve boxes and box extensions.
- 3. Valve box adjustments.
- 4. Establishing electrical conductivity across the valve

B Materials

Refer to Articles 702 and 704 the City Standard Specifications and this section.

Valves 12-inches and smaller - Requirements:

- 1. Resilient Wedge Gate Valves.
- 2. Meets the requirements of AWWA C509- latest revision.
- 3. Supplied with mechanical joints.
- 4. Supplied with conductive mechanical joint (no lead) gaskets.
- 5. Open to the left.
- 6. Non-rising stem.
- 7. O-ring packing.
- 8. 2-inch square operating nut.

C Construction

Install valves according to sections 703 and 704 of the City Standard Specifications.

Furnish and install valve box extensions where needed. All valve box extensions are incidental to the installation of the valve.

D Measurement

The department will measure Furnish and Install (Size) Valve 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 NUMBERDESCRIPTIONUNITSPV.0060.76Furnish and Install 6 Inch ValveEACHSPV.0060.77Furnish and Install 8 Inch ValveEACHSPV.0060.78Furnish and Install 10 Inch ValveEACH

Payment is full compensation for furnishing and installing the valve.

105. Furnish and Install Hydrant, Item SPV.0060.79.

A Description

This work shall consist of furnishing and installing new fire hydrants and abandoning and salvaging existing hydrants as shown on the plans according to section 704.7 of the City Standard Specifications.

B Materials

Refer to Article 702 and 704 of the City Standard Specifications and this section. Furnish hydrants with permanently plugged drain ports or hydrants without drain ports where identified on the plans.

C Construction

Install all hydrants according to Hydrant Detail Drawing and Sections 703 and 704 of the City of Madison City Standard Specifications.

Specifications, unless otherwise shown or specified. Install hydrants with permanently plugged drain ports or hydrants without drain ports in areas where contamination is present and/or where identified on the plans. Abandon and salvage existing hydrants per Section 704.7.3 of the City Standard Specifications.

D Measurement

The department will measure Furnish and Install Hydrant by each new hydrant that is acceptably completed. Abandoning and salvaging hydrants is incidental to this bid item.

E Payment

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

 ITEM NUMBER
 DESCRIPTION
 UNIT

 SPV.0060.79
 Furnish and Install Hydrant
 EACH

Payment is full compensation for furnishing all materials; for disposal of surplus materials; excavation and compaction of select fill material; and restoring the site.

106. Relocate Water Service, Item SPV.0060.80.

A Description

This special provision describes work consisting of relocating existing water service to avoid conflicts with proposed sewer construction.

B Materials

Refer to Article 702 and 704 of the City Standard Specifications and this section.

Provide all pipes, fittings, and appurtenances to match the existing service sizes that need to be relocated.

C Construction

Prior to construction, all ULOs and any necessary utility redesigns shall be completed in order to avoid as many identified conflicts as possible. All work on water lateral services must be inspected and approved by the Water Utility Construction Supervisor and shall conform to all relevant sections of the City of Madison Standards Specifications for Public Works Construction, Latest Edition including all labor; materials; excavation and disposal of materials; and all incidentals necessary to perform the work.

Contact Madison Water Utility for coordination when water service relocations are deemed necessary.

D Measurement

The department will measure Relocate Water Service by the each, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.80Relocate Water ServiceEACH

Work under this item shall include all labor, materials, and incidentals necessary to modify and relocate water lateral services as necessary to avoid conflicts with the proposed sewer construction. This work shall include but not be limited to installation of vertical offsets over or under proposed sewer infrastructure, or horizontal offsets to go around the proposed sewer infrastructure. The length of the pipe to be relocated shall be limited to the immediate areas where sewer is in conflict. The work will include new joints; piping to match the existing pipe sizes and materials; and any other materials necessary to complete the work.

107. Remove and Salvage Drinking Fountain, Item SPV.0060.81.

A Description

This special provision describes removing and salvaging a drinking fountain.

B (Vacant)

C Construction

Carefully remove the existing drinking fountain and disassemble any materials as necessary outside of the right-of-way according to Section 204 of the standard specifications. Store the drinking fountains off the project site for City of Madison pickup. Contact Jon Landsverk, City of Madison Parks Division, at (608) 267-4937 or email at ilandsverk@cityofmadison.com at least three working days prior to removal.

D Measurement

The department will measure Remove and Salvage Drinking Fountain by the each, 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.0060.81. Remove and Salvage Drinking Fountain EACH

Payment is full compensation for disassembling, removing, including disposal of any materials and storage.

108. Drinking Fountain, Item SPV.0060.82.

A Description

Elkay Outdoor EZH20 (LK4420BF1UDBBLK) drinking fountain as outlined in the plans and manufacturer's specifications, or as directed by the engineer. The drinking fountain shall be installed on a 5" concrete slab that is not to exceed 2% grade, which shall be paid for and constructed according to "Concrete Sidewalk 5-Inch".

Contractor shall take care to minimize the disturbed area. Any restoration required for this work shall be paid under the appropriate bid items.

B Materials

The work under this bid item shall include all materials necessary to install the Elkay Outdoor EZH20 (LK4420BF1UDBBLK) drinking fountain as described above and as shown in the detail drawings. This contract calls for the contractor to order, accept delivery and install an Elkay Outdoor EZH20 (LK4420BF1UDBBLK).

C Vacant

D Measurement

The department will measure Drinking Fountain by each fountain installed, completely accepted.

E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

SPV.0060.82

Drinking Fountain

EACH

Payment is full compensation for furnishing and installing the drinking fountain.

109. Remove, Salvage, and Reinstall Boulder Retaining Wall, Item SPV.0060.83.

A Description

This special provision describes work consisting of removing, salvaging, and reinstalling the boulder retaining wall according to the applicable provisions of standard spec 204, as shown in the plans, and as hereinafter provided.

B (Vacant)

C Construction

C.1 Remove and Salvage Boulder Retaining Wall Components

Provide equipment necessary to carefully remove boulder retaining wall according to standard spec 204. Remove only those portions of existing boulder retaining wall as needed to provide for the construction of retaining wall Structure R-13-336. Immediately adjacent to the end of Structure R-13-336, remove existing wall to match the leveling pad elevation of Structure R-13-336. Salvage sufficient materials to complete the reinstallation beyond the limits of Structure R-13-336.

Store the salvaged boulders at a location such as to preserve the integrity, quality, and condition of the existing boulders removed. Reinstall the boulder wall to a similar quality and condition as the existing wall prior to removal. Align the wall face to transition from matching the existing wall to matching the front face of R-13-336.

C.2 Excavation and Backfill

Excavation and preparation of the foundation for the wall and the leveling pad shall be according to standard spec 206. 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.

Conduct backfilling operations in such a manner as to prevent damage or misalignment of the wall components. At no expense to the department, correct any such damage or misalignment as directed by the engineer.

Do not operate tracked or wheeled equipment on the backfill.

C.3 Compaction

Compact wall backfill with each backfill lift.

Compaction of backfill should be accomplished using lightweight compaction devices.

C.4 Reinstall Salvaged Boulder Wall Components

Reinstall boulder retaining wall upon completion of Wall Modular Block Gravity R-13-336. Removal limits as shown on the plans includes a minimal allowance to select boulders that have not been damaged by removal and the integrity has been maintained.

Prior to reinstallation, attain engineer approval of condition and quality that is sound, hard, dense, free from seams or cracks, or other structural defects of the existing boulders for use in reinstallation.

Erect wall elements according to the elevations to match preconstruction conditions.

Remove all debris on the top of each layer of facing units, before placing the next layer of facing units.

D Measurement

The department will measure removal, salvage, and reinstall boulder retaining wall by the linear 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 beyond 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 measured quantities at the contract unit price under the following bid item:

ITEM NUMBERDESCRIPTIONUNITSPV.0060.83Remove, Salvage, and Reinstall Boulder Retaining WallEACH

Payment is full compensation for preparing the site, including all necessary excavation and disposal of materials; salvaging existing boulder materials, supplying new materials if necessary to complete the reinstallation, constructing the wall and providing temporary drainage; providing backfill, backfilling, compacting, and performing compaction testing.

110. Adjust Curb Box, Item SPV.0060.84.

A Description

Adjust existing water service boxes within the project limits to match the finished grade as shown on the plans or directed by the engineer.

B Materials

Refer to Article 702 of the City Standard Specifications and this section.

C Construction

- (1) Refer to Article 703 of the City Standard Specifications and this section.
- (2) Excavate and expose the existing water service boxes to the depth needed to adjust the valve boxes to finished grade.
- (3) Apply extensions as required.
- (4) Leave all service boxes centered over the curb stop and free of dirt and debris.

D Measurement

The department will measure Adjust 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.0060.84 Adjust Curb Box EACH

Work under this item shall include all labor, materials, and incidentals necessary to adjust the existing curb box. Adjustments to new service boxes are incidental to their installation and will not be paid under this item.

111. Relocate Hydrant, Item SPV.0060.85.

A Description

This work shall consist of removing, salvaging, and relocating existing hydrants to a new adjusted location on the same water service according to section 704.7 of the City Standard Specifications.

B Materials

Refer to Article 702 and 704 of the *City Standard Specifications* and this section. Relocate salvaged hydrants with permanently plugged drain ports or hydrants without drain ports where identified on the plans.

C Construction

Relocated and install all hydrants according to Hydrant Detail Drawing and Sections 703 and 704 of the City of Madison City Standard Specifications unless otherwise shown or specified. Install relocated hydrants with permanently plugged drain ports or hydrants without drain ports in areas where contamination is present and/or where identified on the plans. Abandon and salvage existing hydrants per Section 704.7.3 of the City Standard Specifications.

D Measurement

The department will measure Relocate Hydrant by each existing hydrant that is acceptably relocated and installed. Salvaging hydrants and abandoning water services are incidental to this bid item.

E Payment

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

 ITEM NUMBER
 DESCRIPTION
 UNIT

 SPV.0060.85
 Relocate Hydrant
 EACH

Payment is full compensation for furnishing all materials; for disposal of surplus materials; excavation and compaction of select fill material; restoring the site.

112. Inlet Covers Madison Special, Item SPV.0060.86.

A Description

This work shall consist of furnishing and installing Inlet Covers Madison Special in accordance section 507 of the City of Madison City Standard Specifications, as shown in the plans, and as described herein.

B Materials

Furnish inlet covers according to Section 507 of the City of Madison City Standard Specifications and as shown on the plans. Provide frames, grates, and lids per City of Madison City Standard Specifications Standard Detail Drawing 5.7.12C as shown in the plans.

C Construction

Install Inlet Covers Madison Special according to Inlet Covers Madison Special Drawing and Section 507 of the City of Madison City Standard Specifications.

D Measurement

The department will measure Inlet Covers Madison Special by each cover, acceptably installed.

E Payment

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

 ITEM NUMBER
 DESCRIPTION
 UNIT

 SPV.0060.86
 Inlet Covers Madison Special
 EACH

Payment is full compensation for furnishing new covers, including frames, grates, curb plates and all other required materials; for installing and adjusting each cover.

113. Temporary Lighting, Item SPV.0060.87.

A Description

This special provision describes furnishing, installing, maintaining, and removing wood poles, guy wires, luminaires, arms and aerial cable to maintain 100% of the existing lighting system, including the existing lighting within Structure C-13-147.

Work for temporary wood poles and guy wires shall be according to standard spec 661.

B Materials

Furnish aerial cable consisting of an assembly of three No. 4 XLP insulated power conductors with an ACSR messenger (grounding) wire. Provide the quantity of parallel cable assemblies necessary to maintain lighting circuits.

Furnish Type 4 wood poles, 35' long.

Protect any cable that extends from grade to 10 feet above grade by a plastic cable guard.

C Construction

Maintain existing, temporary and proposed lighting within the construction limits for the duration of the project. Maintenance includes but is not limited to replacement of burned out lamps, replacement of knocked down poles and maintaining continuous lighting.

The contractor shall keep streetlights in operation throughout the construction project until new lights are installed and operational as follows:

- 1. Maintain a similar location and same number of lights as existing.
- 2. The distance between adjacent street lights shall be no greater than 250 feet
- 3. If new streetlights are installed by the contractor to temporarily replace existing lights, each one shall be 250 watt HPS or equivalent lumen output, full cutoff.

Provide off-hours contact name(s) and phone number(s) for the city and police department for repair purposes and be able to respond within 2 hours to the project site for knockdowns or other work that must be completed in a timely manner. All other maintenance needs shall be completed within 24 hours of notification. It is also the contractor's responsibility to continuously monitor the existing and proposed lighting systems operation.

Coordinate work with the city's forces. Existing lighting contains 120 volt circuits. New lighting may need to be temporarily wired from existing circuits to maintain street lighting. Arrange for all required electrical service modifications with the utility. Pay all utility company installation costs for modifications required to maintain the Temporary Traffic Signal. The City of Madison will pay for energy costs.

D Measurement

The department will measure Temporary Lighting as a single unit for the contract, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0060.87Temporary LightingEACH

Payment is full compensation for furnishing, installing and removing wood poles, aerial cable, luminaires, arms, guy wires, maintaining lighting units, replacement of burned out lamps; replacement of knockdowns, and for furnishing and installing splice connectors.

114. Optical Signal Preempt, Item SPV.0060.88.

A Description

This special provision describes furnishing and installing optical signal preempt equipment for the signalized intersections. The acceptability of alternate equipment rests solely with the City of Madison Traffic Engineering Division.

B Materials

Provide the following material:

- 1. Two channel discriminator
- 2. Optical detectors, four total.
- 3. Card rack for each intersection, one total.
- 4. Detector cable as necessary.
- 5. Cables and auxiliary equipment as necessary for a complete operating system.

C Construction

Install detectors on the top horizontal member of trombone arms, between the first traffic signal head and pole, and as otherwise shown on the plan or directed by Madison Traffic Engineering.

The detectors will generally be on the far side of the intersection, and aimed at approaching traffic, as further directed by Madison Traffic Engineering staff. Install detector cable from the detector to the control cabinet at each intersection, using the shortest path.

All installation methods to be consistent with the manufacturer's instructions. Card rack and discriminator installation, as well as cabinet connections, will be made by City of Madison Traffic Engineering staff.

D Measurement

The department will measure Optical Signal Preempt as a single unit for each intersection, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT

SPV.0060.88 Optical Signal Preempt EACH

Payment is full compensation furnishing and installing detectors and cable; for furnishing and delivering discriminators, card racks, cables and miscellaneous materials to the city Traffic Engineering Field Office, 1120 Sayle Street.

115. Temporary Traffic Signals Atwood Avenue - Walter Street, Item SPV.0060.89; Temporary Traffic Signals Atwood Avenue - Cottage Grove Road, Item SPV.0060.90.

A Description

This special provision describes installing temporary traffic signals for intersections, using overhead electrical wiring to temporary traffic signal poles and temporary supports, according to standard spec 661 and as amended herein.

The City of Madison traffic signal personnel will perform the traffic signal inspection.

B Materials

Furnish and use materials that are according to standard spec 661.2 and as amended herein.

Furnish and install Optical signal preempt for the temporary signals. The northbound and southbound approach directions each need to be detected and brought back individually to the signal control cabinet.

B.1 Luminaires

Furnish and install luminaire arms and luminaries conforming to the pertinent requirements of standard spec 657 and 659. The luminaries shall be 250 watt, full cutoff, high-pressure sodium or 97 watt, LED and shall be furnished with photo electric cells to turn the luminaire on and off.

B.2 Signal Poles and Signal Faces

Furnish new or used poles and traffic signal standards for use in temporary signals conforming to the pertinent requirements of standard specs 657 and 661. Furnish signal faces according to standard spec 661.2.2.2.

B.3 Pedestrian Push Buttons

Furnish pedestrian push buttons conforming to standard spec 658.

B.4 Signal Cabinet

Furnish new or equivalent to new materials as specified in standard spec 661.2 and as follows.

B.5 Controller

Furnish a new or equivalent to new Econolite ASC3-2100 controller with Telemetry Module. The controller shall be compatible with the City of Madison closed loop system (CLS).

B.6 Conflict Monitor

Furnish a new or equivalent to new NEMA+ 12-Channel Signal Conflict Monitor, with LCD display, and an Ejector Tab card release on side of card.

Provide keys to the temporary signal control cabinet to the City of Madison in addition to other required keys according to standard spec 661.2.1.

C Construction

C.1 General

The City of Madison will load the timing programs into the controller. Do not use new permanent signal conduit for temporary signal wiring. Provide horizontal and vertical clearance between sidewalks and guy wires.

Arrange for all required electrical service modifications with the utility. Pay all utility company installation costs for modifications required to maintain the Temporary Traffic Signal. The City of Madison will pay for energy costs.

Locate and avoid all underground and aboveground utilities and structures. Install temporary supports as required to avoid conflicts with proposed curb and gutter, sidewalk, and traffic signal poles. The engineer will approve the final location of wood poles prior to installation.

Use of self-supporting poles will likely be required due to limited right-of-way limitations and depending on contractor operations.

Maintain temporary signals throughout the construction of the project, until such time that the new signals are operational and have been accepted by and turned over to the city.

C.2 Existing City Equipment

City forces will remove all existing signal equipment after temporary signals are in place. Contact Troy Vant at (608) 266- 9031 to coordinate signal removals.

C.3 Signal Heads

Install signal heads for the same vehicle travel direction at a minimum of 11 feet from each other. Provide pedestrian signals for each crosswalk open to pedestrians and locate them so that they are clearly visible to pedestrians prior to and during their crossing. Move signal heads as necessary or as directed by the engineer.

C.4 Pedestrian Push Buttons

Install pedestrian push buttons for pedestrian crossings. Mount push buttons so that they are wheelchair accessible from temporary crosswalks. Install pedestrian push buttons as required by the MUTCD chapter 4.

C.5 Luminaires

Orient luminaries as shown on the plans to illuminate both traffic lanes and sidewalks on both sides of the respective street.

C.6 Cabinet

Provide a representative of the supplier of their cabinet on site at the time of the turn on. Install equipment in the cabinet as follows:

C.6.1 Controller

Install the controller and ensure that it is operational as part of the City of Madison closed loop system.

C.7 Maintenance

When a signal installation is not in operation, hood, turn, or take down the signal head(s) to clearly indicate that the signal is not in operation. (See MUTCD 4D-1).

C.8 Pre-emption Hardware, Cable, and Equipment

Install detector cards, sensors, cables, and all required ancillary equipment, appurtenances and mounting hardware at the temporary signals to provide a fully functioning pre-emption system. Arrange testing of the pre-emption system with Troy Vant, (608) 266-9031, before turn-on of the temporary signal.

C.9 Contractor Qualifications

Demonstrate the ability to operate all required traffic signal equipment listed in this special provision for the engineer and the City of Madison prior to starting work. Provide proof of the ability to obtain all required traffic signal equipment listed in this special provision to the engineer and the City of Madison prior to starting work.

D Measurement

The department will measure Temporary Traffic Signals (Location), as a single unit at each intersection, acceptably completed.

E P ayment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.89	Temporary Traffic Signals Atwood Avenue – Walter Street.	EACH
SPV.0060.90	Temporary Traffic Signals Atwood Avenue – Cottage Grove Road	EACH

Payment is full compensation according to standard spec 661.5.

116. Wastewater Control 150 GPM, Item SPV.0060.91.

A Description

Work under this item includes controlling or diverting, to the city of Madison's satisfaction, sanitary sewer flows during reconstruction of the sanitary sewer. There is a Lift Station Force Main connected to the City Sewer on the eastern project limits that will need to be accounted for.

B (Vacant)

C Construction

Provide a pump with a capacity of 150 gallons per minute and all associated equipment required to maintain a functioning sanitary sewer system during construction. It is not acceptable, at any time, to disrupt normal flow of wastewater in sanitary sewer service laterals without prior approval from the City of Madison. This condition also holds at the time of connection of an existing lateral to the new sewer main.

If the contractor elects to use bypass pumping as a means of wastewater control, the methods, equipment, type of hose, etc. are subject to approval by the City of Madison Engineer. Ramp any hoses crossing streets, driveways, parking areas, etc., to prevent damage to hoses. Contain spillage of wastewater to be within the utility trench and dispose of spillage into existing sewer downstream to previously installed sewer piping. Spillage of wastewater to adjacent streets, lawns, etc. will not be tolerated. Should spillage occur, cease all construction operations immediately and begin cleanup operations. Clean site thoroughly to the satisfaction of the engineer prior to the resumption of any construction operations.

D Measurement

The department will measure Wastewater Control 150 GPM as a single unit for the contract, 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.0060.91 Wastewater Control 150 GPM EACH

Payment is full compensation for furnishing all labor, tools, equipment and other incidentals to complete the contract work.

117. Remove, Salvage, and Reinstall Riprap Heavy, Item SPV.0060.92.

A Description

This special provision describes work consisting of removing, salvaging, and reinstalling riprap heavy according to the applicable provisions of standard spec 204 and 606, as shown in the plans, and as hereinafter provided.

B (Vacant)

C Construction

Remove and store existing riprap heavy around existing storm sewer outfall and at the location of the proposed outfall in conformance with applicable provisions in the standard spec 204.

Upon the completion of the installation of the proposed storm sewer outfalls, reinstall salvaged riprap heavy in conformance with provisions in the standard spec 606.

D Measurement

The department will measure Remove, Salvage, and Reinstall Riprap Heavy as a single complete unit of work, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT

SPV.0060.92 Remove, Salvage, and Reinstall Riprap Heavy EACH

Payment is full compensation for furnishing all labor, tools, equipment and other incidentals to complete the contract work.

118. Construction Staking Sanitary Sewer, Item SPV.0060.93.

A Description

Perform work according to the applicable provisions of standard spec 650.

B (Vacant)

C Construction

Set and maintain construction stakes or marks as necessary to achieve the required accuracy and to support the method of operations. Set and maintain a minimum of two construction stakes to establish location and grade of sanitary sewer structures according to the plans and details for sanitary sewer structures. Set and maintain construction stakes to establish location and grade of sanitary sewer main. Provide stakes that establish the horizontal and grade elevation of sanitary main at intervals of 25 feet for a minimum of 100 feet from each structure and at intervals of 50 feet thereafter. Determine offsets in conjunction with contractor requirements. Verify the invert elevations of existing structures which are to remain and be connected into. Locate all stakes included in this bid item to within 0.02 feet horizontally and establish the grade elevation to within 0.01 feet vertically.

Place additional intermittent stakes as necessary to provide staking information at critical areas such as utility, driveway, roadway, and structure crossings.

The department will measure Construction Staking Sanitary Sewer as a single complete unit of work, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT

SPV.0060.93 Construction Staking for Sanitary Sewer EACH

Payment is full compensation for locating and setting all construction stakes; and for relocating and resetting damaged or missing construction stakes.

119. Construction Staking Water Main, Item SPV.0060.94.

A Description

Perform the work according to the applicable provisions of standard spec 650.3.2 and 650.3.6.

B (Vacant)

C Construction

Set and maintain construction stakes and marks as necessary to achieve the required accuracy and to support the method of operations. Set and maintain construction stakes to establish location of water mains and fittings. Provide stakes at 25-foot intervals to 100 feet from valves, the 50-foot intervals at any bends that are to be constructed. Locate all stakes include in this bid item to within 0.02 feet horizontally to 0.01 feet vertically.

Place additional intermittent stakes as necessary to provide staking information at critical areas such as utility, driveway, roadway, and structure crossing.

D Measurement

The department will measure Construction Staking Water Main as a single complete unit of work, acceptably completed.

E Payment

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

 ITEM NUMBER
 DESCRIPTION
 UNIT

 SPV.0060.94
 Construction Staking Water Main
 EACH

Payment is full compensation for locating and setting all construction stakes; for relocating and resetting damaged or missing construction stakes.

120. Temporary Overhead Fiber Optic, SPV.0060.95

A Description

This special provision describes furnishing and installing 24 and 144-count fiber overhead on a temporary basis during the reconstruction project as specified in standard spec 651, 655, 670, and 678, as shown on the plans, and as provided hereinafter.

Splicing temporary fiber into existing splice points, maintaining existing terminations and laterals is included in this bid item. Contractor shall maintain all existing connections during the duration of the project.

B Materials

Furnish single mode (SM), It armored, loose-tube 24 and 144-count fiber optic cable rated for outdoor use.

All fiber optic cable glass shall be supplied by the same manufacturer and shall be a part of a fiber optic cable utilizing loose tube construction with the following properties:

Parameters	Single Mode
Туре	Step Index
Core Diameter	8.3 µm (nominal)
Cladding Diameter	125 ± 1.0 µm
Core to Cladding Offset	≤0.8 µm
Coating Diameter	245 ± 10 μm
Cladding Non-Circularity	≤1.0%
Proof Tensile Test	0.7 GPa
Attenuation	@ 1310 nm ≤ 0.4 dB/km @ 1550 nm ≤ 0.3 dB/km
Chromatic Dispersion Zero Dispersion	1310 ± nm (centered on a nominal operating wavelength of 1310)
Zero Dispersion Slope	<0.092 ps/nm²/km
Maximum Dispersion	≤ 2.8 ps/nm/km at 1285 – 1330 nm
Cut-Off Wavelength	1260 nm

This item includes furnishing, installing, maintaining, and removing temporary wood poles and equipment necessary to hang fiber from wood poles and/or existing street light and traffic signal poles.

C Construction

C.1 General

The contractor shall furnish and maintain temporary overhead fiber, including furnishing and maintaining wood poles, harnesses required to hang fiber, and fiber splices.

All network outages shall not start sooner than midnight and not extend longer than 6:00 AM.

D Measurement

The department will measure Temporary Overhead Fiber as a single complete unit of work, acceptably completed. Completion of this item shall be when permanent fiber optic equipment has been installed and completed as determined by the project engineer and City of Madison Traffic Engineering.

E Payment

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

SPV.0060.95 Temporary Overhead Fiber EACH

Payment is full compensation according to standard spec 651, 655, 670, and 678.

121. Shortgrass Prairie Seed Mix, Item SPV.0085.01.

A Description

This special provision describes furnishing and placing Shortgrass Prairie Seed Mix at the location shown on the plans and according to standard spec 630 and as hereinafter provided.

B Material

The seed mix shall consist of any of the following or approved equal:

- 1) "Short Prairie for Medium Soils" as manufactured by Prairie Nursery, Westfield, WI. Seed shall be placed at a rate of 10 lbs per acre.
- 2) "Shortgrass Prairie Seed Mix for Medium-Dry Soils" as manufactured by Prairie Moon Nursery, Winona, MN. Seed shall be placed at a rate of 12.97 lbs per acre.
- 3) "Shortgrass Prairie for Medium Soils" as manufactured by Agrecol LLC., Evansville, WI. Seed shall by placed at a rate of 13.5 lbs per acre.

4) "Mesic Short Prairie Mix" as manufactured by Shooting Star Native Seed, Spring Grove, MN. Seed shall be placed at a rate of 10 lbs per acre.

Substitution requests shall be submitted to City Engineering for review and approval. Contractor is notified that if an alternative is allowed, the rate of seed may be altered as a condition of approval, and seed shall be native ecotypes. No improved varieties are allowed. Seed source shall be native ecotypes from Southeastern Minnesota, Eastern Iowa, Southern Wisconsin or Northern Illinois.

May be used for areas where conditions are dry, native species are desired and/or height is a concern, e.g., traffic medians, roundabouts, terraces, and as shown in the plans. Most species in this mix range from 2-3' in height.

C (Vacant)

D Measurement

The department will measure Shortgrass Prairie Seed Mix by the square yard of surface area, 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.0085.01. Shortgrass Prairie Seed Mix LB

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

122. Railing Pedestrian Steel B-13-864, Item SPV.0090.01.

A Description

This special provision describes fabricating, galvanizing, painting and installing Railing Pedestrian Steel B-13-864 on the concrete wingwalls according to standard spec 506, 513 and 517 and the plan details, as directed by the engineer, and as hereinafter provided.

B Material

All materials for the steel railing shall be be according to standard spec 513.2. Railing assemblies shall be galvanized and receive a two-coat paint system.

This item includes the rail at the concrete abutment wingwalls and shall include base plates and adhesive anchors.

Color

The top coat shall be brown (federal color 30045)

C Construction

Construct the railing according to standard spec 513.3.

D Measurement

The department will measure "Railing Pedestrian Steel B-13-864" 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.0090.01

Railing Pedestrian Steel B-13-864

LF

Payment is full compensation for detail design and shop drawings for railing on bridge abutment wingwalls, fabricating, galvanizing, painting, transporting, and installing the railing, including any touch-up and repairs; furnishing and installing base plates and adhesive anchors; and for furnishing all labor, tools, equipment, materials and incidentals necessary to satisfactorily complete the work.

123. Concrete Curb & Gutter 24-Inch Type D Special, Item SPV.0090.02;

Concrete Curb & Gutter 30-Inch Type D Special, Item SPV.0090.03;

Concrete Curb & Gutter 24-Inch Type D Special HF, Item SPV.0090.04;

Concrete Curb & Gutter 30-Inch Type D Special HF, Item SPV.0090.05;

Concrete Curb & Gutter 24-Inch Type X Special, Item SPV.0090.06;

Concrete Curb & Gutter 24-Inch Type A Special, Item SPV.0090.07;

Concrete Curb & Gutter 30-Inch Type A Special, Item SPV.0090.08.

A Description

Construct concrete curb and gutter as shown in the plans, and according to standard spec 601.

B Materials

Conform to standard spec 601 and as the plans show.

C Construction

Conform to standard spec 601 and as the plans show.

D Measurement

The department will measure Concrete Curb & Gutter (Type) Special by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.02	Concrete Curb & Gutter 24-Inch Type D Special	LF
SPV.0090.03	Concrete Curb & Gutter 30-Inch Type D Special	LF
SPV.0090.04	Concrete Curb & Gutter 24-Inch Type D Special HF	LF
SPV.0090.05	Concrete Curb & Gutter 30-Inch Type D Special HF	LF
SPV.0090.06	Concrete Curb & Gutter 24-Inch Type X Special	LF
SPV.0090.07	Concrete Curb & Gutter 24-Inch Type A Special	LF
SPV.0090.08	Concrete Curb & Gutter 30-Inch Type A Special	LF

Payment is full compensation conforming to standard spec 601.

124. Concrete Curb & Gutter Type Special Parking Lot, Item SPV.0090.09.

Construct the curb and gutter according to standard spec 601 and to the dimensions and shapes of existing private parking lot curb and gutter that will be tied into.

125. Concrete Gutter 24-Inch Type D Special, Item SPV.0090.10.

A Description

Construct concrete curb as shown in the plans, and according to standard spec 601.

B Materials

Conform to standard spec 601 and as the plans show.

C Construction

Conform to standard spec 601 and as the plans show.

D Measurement

The department will measure Concrete Curb Type A Special by the linear foot, acceptably completed.

E Payment

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

SPV.0090.10 Concrete Gutter 24-Inch Type D Special LF

Payment is full compensation conforming to standard spec 601.

126. Reflective Sign Post, Item SPV.0090.12.

A Description

This special provision describes furnishing and installing sign posts according to the applicable provisions of standard spec 634, as shown in the plans, and as hereinafter provided.

B Materials

Furnish sign posts conforming to the standard specification for hot rolled carbon sheet steel, commercial quality, ASTM A-570-GR-33 for zinc coating tubing to resist corrosion. Furnish 2-inch, schedule-40 sign post at the length shown on the plans, with threading on the bottom end, as detailed in the plans, and a water tight end cap on the top end.

For reflective sign posts provide two sheets of engineer grade yellow sheeting completely around pipe as shown in the plans.

C Construction

Install the signposts at the locations shown on the plans and approved by the engineer. If the finished grade cannot be determined, ask the engineer to identify the final grade. All signs shall be in a true vertical position. Install all signs to conform to the latest edition of the Manual on Uniform Traffic Control Devices. Also, locate all underground utilities prior to placing signposts. Cut off excess length of post in the field to provide the desired sign clearance.

Notify the City of Madison within three working days of placing the sign post for signs the city will install. Contact Phil Nehmer, City of Madison Traffic Engineering at (608) 267-1960.

D Measurement

The department will measure Reflective Sign Post by the linear foot, acceptably completed, measured from the top of the thread to the end of the sign post rounded up to the nearest foot.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0090.12Reflective Sign PostLF

Payment is full compensation for furnishing, hauling, and installing the posts; threading; treating cut post ends; providing and installing a water tight top end cap; providing hardware and anchors; and for reflective sheeting. Replace all materials damaged during construction with new items at no cost to the department.

127. Marking Line Epoxy 6-Inch, Item SPV.0090.13; Marking Crosswalk Epoxy Ladder Pattern 18-Inch, Item SPV.0090.14; Marking Stop Line Epoxy 24-Inch, Item SPV.0090.15.

A Description

Perform the work under this item as shown in the plans and according to the applicable provisions of standard spec 646 and as detailed.

B Materials

Conform to standard spec 646 and as the plans show.

C Construction

Conform to standard spec 646 and as the plans show.

The department will measure Marking (Type) by the linear foot, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.13	Marking Line Epoxy 6-Inch	LF
SPV.0090.14	Marking Crosswalk Epoxy Ladder Pattern 18-Inch	LF
SPV.0090.15	Marking Stop Line Epoxy 24-Inch	LF

Payment is full compensation conforming to standard spec 646.107.

128. Electrical Wire Lighting, 14-3 Grounded, Item SPV.0090.16.

A Description

This special provision describes furnishing and installing electrical wire lighting, 14-3 type UF cable according to standard spec 655 and these specifications.

B Material

Furnish type UF cable with ground including the number and size of conductors as the plans show. Use cable conforming to ANSI/UL 493.

C Construction

Furnish and install one cable to each LED luminaire from base of pole to the luminaire.

D Measurement

The department will measure Electrical Wire Lighting, 14-3 Grounded by the linear foot, acceptably completed, measured from the splice with the system lighting circuit in the pole base to the connection terminals in the luminaire.

E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

SPV.0090.16

Electrical Wire Lighting, 14-3 Grounded

LF

Payment is full compensation for furnishing and installing all materials, and for furnishing all equipment and incidentals necessary to complete the work.

129. Loop Detector Lead-In Cable Special, Item SPV.0090.17.

A Description

This special provision describes furnishing and installing loop detector lead in cable according to standard spec 655.

B Materials

Furnish 0.25 inch diameter, 4-conductor, #18 AWG, waterproof, shielded, polypropylene insulation cable, with HDPE outer jacket. Meeting IMSA specifications. Provide loop detector lead in cable to be smooth on the outside without any ripples or ribbing from cable wires.

C Construction

Furnish and install one cable for every two loops from each loop handhole to the intersection control cabinet via the most direct route, without intermediate splicing. Most of the loops will be new and are shown on the plan. Install cable for some existing loops.

Verify cable needs with the City of Madison Traffic Engineering staff before completing intersection wiring.

The department will measure Loop Detector Lead In Cable by the linear foot, acceptably completed, measured from the splice with the loop lead in wire along the centerline of the conduit to its connection with terminals in the control cabinet.

E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

SPV.0090.17

Loop Detector Lead In Cable Special

LF

Payment is full compensation for furnishing and installing all materials, and for furnishing all equipment and incidentals necessary to complete the work.

130. Fiber Optic Cable 24-Count, Item SPV.0090.18; Fiber Optic Cable 144-Count, Item SPV.0090.19.

A Description

This special provision describes furnishing and installing 24 and 144-count as specified in standard spec 651, 655, 670, and 678, as shown on the plans, and as provided hereinafter.

B Materials

Furnish single mode (SM), It armored, loose-tube 24 and 144 count fiber optic cable rated for outdoor use.

All fiber optic cable glass shall be supplied by the same manufacturer and shall be part of a fiber optic cable utilizing loose tube construction with the following properties:

Parameters	Single Mode
Type	Step Index
Core Diameter	8.3 µm (nominal)
Cladding Diameter	125 ± 1.0 µm
Core to Cladding Offset	≤0.8 µm
Coating Diameter	245 ± 10 μm
Cladding Non-Circularity	≤1.0%
Proof Tensile Test	0.7 GPa
Attenuation	@ 1310 nm ≤ 0.4 dB/km @ 1550 nm ≤ 0.3 dB/km
Chromatic Dispersion Zero Dispersion	1310 ± nm (centered on a nominal operating wavelength of 1310)
Zero Dispersion Slope	<0.092 ps/nm²/km
Maximum Dispersion	≤ 2.8 ps/nm/km at 1285 – 1330 nm
Cut-Off Wavelength	1260 nm

C Construction

Follow all manufacturer's recommended installation procedures. Contact the Electrical Operations Lead Worker at the City of Madison Traffic Engineering Shop, (608) 266-9031 a minimum of seven working days in advance to coordinate installing equipment in contractor installed or existing Traffic Engineering conduits and handholes.

The department will measure Fiber-Optic Cable-24 and 144-Count 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 NUMBERDESCRIPTIONUNITSPV.0060.18Fiber-Optic Cable 24 CountLFSPV.0060.19Fiber-Optic Cable 144 CountLF

Payment is full compensation for furnishing and installing the fiber optic cable.

131. Staking Temporary Pavement, Item SPV.0090.20.

A Description

Work under this item consists of contractor-performed construction staking required to establish the horizontal position for the temporary pavement. Perform all work under this item according to standard spec 105.6 and 650.

B (Vacant)

C Construction

Use methods that conform and are according to the pertinent requirements of standard spec 650.3. Place construction stakes for temporary pavement at intervals of 25 feet. A single stake per cross section is required. Set and maintain as necessary additional stakes per cross section to achieve the required accuracy and to satisfy the method of operations. Locate all temporary pavement construction stakes to within 0.02 foot of the true horizontal position.

D Measurement

The department will measure Construction Staking Temporary Pavement by the linear foot, acceptably completed, measured along the mainline reference line. The department will not measure construction staking for base underlying the temporary pavement.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0090.20Staking Temporary PavementLF

Payment is full compensation for locating and setting all construction stakes and for relocating and resetting damaged or missing construction stakes. Standard spec 650.5(2) shall apply for final payment.

132. Sanitary Sewer Pipe PVC, 8-Inch, Item SPV.0090.21.

A Description

This special provision describes installing Sanitary Sewer Pipe PVC, 8-Inch at the alignment and grades shown on the plan. All sections of the sewer mainline are required to pass a low pressure air test, mandrel test, and a visual inspection via televising as specified in Article 501.3(b) of the City of Madison Standard Specifications for Public Works Construction – Current Edition. Costs associated with the testing of the gravity main are included in the contract unit price bid for this item.

B Materials

Provide solid-wall Poly (Vinyl Chloride) (PVC) sanitary sewer pipe and fittings meeting the requirements for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings, ASTM D 3034.

Provide pipe and fittings having a standard dimension ratio of 26 or 35 as called out on the plan set.

Assemble joints using or elastomeric or solvent cement as recommended by the pipe manufacturer.

The assembled joints will be required to pass the performance tests as required in ASTM D3212 elastomeric or ASTM D2564-solvent cement.

Sewer mains deeper than 12' will be required to meet the standards or ASTM D3034 SDR-26.

The pipe materials (ASTM D3034 SDR 35 or 26) will be the same pipe material type from sewer access structure to sewer access structure.

C Construction

Install the sanitary sewer pipe according to all applicable provisions of the City of Madison Standard Specifications for Public Works Construction – Current Edition.

Remove all abandoned or existing material located in the new sanitary sewer alignment. Removal of material (including existing sanitary sewer/water main/etc.) is incidental to this bid item.

Use manufactured wye fittings to install new laterals to the new main as called for on the plans; provide and place according to standard spec 503 for Public Works Construction – Current Edition. Do not install saddle type wyes without prior approval from the city of Madison.

Complete testing and televising of new sewer lines according to Article 501 of the City Standard Specifications for Public Works Construction - Current Edition.

D Measurement

The department will measure Sanitary Sewer Pipe PVC, 8-Inch in length by the linear foot, acceptably completed.

Sanitary Sewer Pipe PVC, 8-Inch will be measured through sanitary sewer structures, from the center of sanitary sewer casting to center of sanitary sewer casting. Sanitary Sewer Pipe PVC, 8-Inch not terminating at a sanitary sewer structure will be measured to the end of pipe. Deductions from the measure length will not be made for wye installations.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0090.21 Sanitary Sewer Pipe PVC, 8-Inch LF

Payment is full compensation for furnishing all materials, necessary to perform the work; excavation of the trench, except tunneling and jacking; installation and removal of sheeting and bracing; removal of water from the trench; disposal of surplus material from the trench; backfilling the trench and compaction of the backfill material; embankment over the sewer using surplus material from the excavation of the trench; bedding the pipe; laying the pipe and installing the fittings and accessories; jointing and sealing of joints in pipe, fittings and accessories; encasement, where specified; connections to existing structures; cleaning out the sewer; restoring the site; and all other work incidental to the installation of sanitary sewers.

133. Sanitary Sewer Lateral, Item SPV.0090.22.

A Description

This work consists of excavating required trenches, connecting the lateral to the mainline pipe, placing bedding material, connecting the new lateral to the existing lateral, all required fittings, couplings, and bends, backfilling and compacting the trenches and restoring the work site as provided by the plans, specifications and contract. This work also consists of locating, identifying, and abandoning "inactive" laterals.

B Materials

Furnish sanitary sewer pipe and fittings that are solid-wall Poly Vinyl Chloride (PVC) and that conform to the requirements of the Specification for PVC Sewer Pipe and Fittings, ASTM D 3034.

Provide sanitary sewer pipe and fittings having a standard dimension ratio of 26 and 35.

Furnish elastomeric or solvent cement joints made as recommended by the manufacturer.

Sewer lateral pipe deeper than 12' will be required to be ASTM D3034 SDR-26.

Compression coupling connections to the existing sewer laterals in conformance to Standard Detail Drawing 5.3.3, Coupling detail, from the City of Madison Standard Specifications for Public Works Construction - Current Edition.

C Construction

Install laterals according to Article 503.3 of the City of Madison Standard Specifications for Public Works Construction – Current Edition.

The use of 45-degree bends is not permitted except with connecting to a wye at the sanitary sewer main. Bends of 22.5 degrees or less may be used, provided they are separated by at least 2 feet of straight pipe. Provide new lateral pipe having a minimum diameter of 4 inches that is also greater than or equal to the diameter of the adjoining lateral. Connecting a new lateral pipe to an existing lateral having a smaller diameter than the existing lateral is not permitted.

Per the City of Madison Standard Specifications for sanitary sewer lateral construction on street reconstruction projects, contractors are encouraged to begin installation of sanitary lateral pipe at the proposed sewer main. If contractor starts excavation for the lateral at the property line, it will be at the contractor's risk. A portion of the sanitary sewer laterals were located and surveyed prior to design. Laterals located are marked on the plan as Lateral Located (TYP). If tree conflicts are encountered during the sanitary lateral replacement process, contractors are instructed to follow the new policy set in the Standard Specifications for Public Works Construction, Current edition. No Utility Line Openings (ULOs) will be granted for the inability to locate the sanitary lateral at the property line. Any extra sidewalk removal will not be compensated to the contractor looking for an existing sanitary lateral at the property line.

Contractors will be required to have a locator device on-site if they intend to start laying lateral pipe at the property line to minimize the amount of extra sidewalk removal. Each sanitary lateral will have a maximum of four sidewalk squares removed and replaced. No additional compensation will be awarded beyond this amount for the replacement of a sewer lateral. If laterals called for reinstatement on the plans are to be plugged under the direction of the engineer on-site, contractors are required to use a sonde device to confirm that the laterals that are called abandonment are not active, Couple the junction of a new lateral pipe to an existing lateral pipe as required in the field by the City of Madison. Saw cut the existing main to accommodate a clean joint for the installation of the compression couplings. Placed the coupling as directed by the City of Madison and per Standard Detail Drawing 5.3.3, Coupling Details, from the City of Madison Standard Specifications for Public Works Construction - Current Edition

D Measurement

The department will measure Sanitary Sewer Lateral by the linear foot, acceptably completed.

The quantity to be paid will be measured from the connection of the mainline sewer pipe to the connection of the existing sanitary lateral along the centerline of the pipe.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0090.22 Sanitary Sewer Lateral LF

Payment is full compensation for determining whether laterals are "active", "inactive", or abandoned, and the exact location and size of "active" lateral reconnections.

Connection of lateral to the proposed sewer main and the first 5 feet of lateral pipe associated with the connection is paid under bid item Sanitary Lateral Reconnect.

Select fill for sanitary sewer later is paid under bid item Select Fill For Sanitary Sewer. The quantity for this item may be increased or decreased beyond the limits set forth in Article 104 of the City of Madison Standard Specifications for Public Works Construction – Current Edition.

134. Remove Sanitary Sewer Pipe, Item SPV.0090.23.

A Description

This special provision describes removing sanitary sewer pipe within the right-of-way as called for on the plan set according to Article 203 of the City of Madison Standard Specifications for Public Works Construction – Current Edition. "Pipe to be removed that is in the same trench as a new pipe will not be compensated as remove pipe and will be considered to be incidental to the new pipe installation." The same trench will be considered to be any pipe located within 3' horizontally of the pipe being installed. This includes unidentified pipe that is smaller than 10 inches in diameter. If the pipe to be removed ends along a pipe run, as opposed to ending at a structure, the contractor will end the removal with a saw cut of the existing pipe and plug the remaining end as directed by the engineer. Plugging the structure or pipe to which the pipe being removed was connected will be compensated for under a separate bid item (Abandon Sanitary Sewer - Pipe Plug, Item SPV.0060.73). If the contractor, for his convenience, decides to remove a section of pipe to a full section, the additional removal will not be given consideration for additional compensation.

B (Vacant)

C Construction

Sawcut the pipe ends at the pipe removal limits if the pipe as a whole is not called for removal. Dispose all pipe removed. All trenches, holes and pits resulting from the removal or abandoning of pipe and other miscellaneous structures will be filled with satisfactory soil or select fill, placed in layers not more than 12 inches in thickness. Select backfill will be required for any structure or pipe within the roadway that will not be filled with another structure or pipe. All fill material required will be considered incidental to the removal or abandonment. Each layer will be thoroughly compacted by means of approved tampers, rollers or vibrators. Water will not be used to expedite settlement of backfill except with the approval of the engineer; this provision will not be construed to require an excavation to be dewatered before placing backfill, if backfilling can be performed in such manner as to displace the water or prevent its entrapment in the backfill

D Measurement

The department will measure Remove Sanitary Sewer Pipe by the linear foot, measured along the centerline of the sanitary sewer pipe removed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0090.23Remove Sanitary Sewer PipeLF

Payment is full compensation for furnishing all materials, labor, tools, equipment and incidentals necessary to complete this item of work. Payment will include the Select Fill material required to backfill the trench created by pipe being removed.

135. Select Fill for Sanitary Sewer, Item SPV.0090.24.

A Description

This special provision describes furnishing and placing select fill over the sanitary sewer main and laterals along the entire length of the pipe.

B Materials

Provide select fill meeting the requirements of Article 202.2(b) of the City of Madison Standard Specifications for Public Works Construction – Current Edition for select fill for sanitary sewer mains and laterals.

C Construction

Install select fill for sanitary sewer according to all applicable provisions of Article 502.1(e) of the City of Madison Standard Specifications for Public Works Construction – Current Edition.

D Measurement

The department will measure Select Fill for Sanitary Sewer in length by the linear foot, acceptably completed. Measurement will be completed along the centerline of the installed sanitary sewer pipe and includes the length through Sewer Access Structures.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT

SPV.0090.24 Select Fill For Sanitary Sewer LF

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

136. Utility Trench Patch Type III, Item SPV.0090.25.

A Description

Construct work under this item to conform to the requirements of Article 502 and Standard Detail Drawing 5.2.4 of the City of Madison Standard Specifications for Public Works Construction – Current Edition for Type III Utility Trench Patch.

B Material

Provide new crushed stone meeting the requirements of standard spec 305, Base Aggregate Dense, 1 1/4-Inch. Provide new asphaltic surface per standard spec 465.

C Construction

Install Utility Trench patch according to all applicable provisions of Article 502 and SDD 5.2.4 of the City of Madison Standard Specifications for Public Works Construction – Current Edition for Type III Patch.

D Measurement

The department will measure Trench Patch by the linear foot, measured along the centerline of the patch, 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.0090.25

Utility Trench Patch Type III

LF

Payment is full compensation for all materials necessary to restore the pavement but does not include the Select Fill material required to backfill the trench; and includes placing, consolidating and compacting the materials used to restore the pavement and all other work incidental the installation of utility trench patches.

137. Sanitary Sewer Lining, Item SPV.0090.26.

A Description

Install cured-in-place pipe (CIPP) formed by the insertion of a resin-impregnated flexible felt tube, saturated with a thermosetting resin, installed into the existing pipeline and cured into a hard impermeable cured-in-place pipe at the depth and location shown on the plans.

Perform the work according to the plans and the Standard Specifications for Sewer and Water Construction in Wisconsin, latest edition and amendments (SSSW), ASTM F1216-06, Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube, and as hereinafter provided and these special provisions.

This specification references ASTM F1216 (Rehabilitation of Pipelines by the Inversion and Curing of a Resin-Impregnated Tube), ASTM D5813 (Cured-In-Place, Thermosetting Resin Sewer Pipe), ASTM D638 (Test Methods for Tensile Properties of Plastics), ASTM D790 (Test Methods for Flexural Properties of Non-reinforced Plastics), ASTM C581 (Standard Practice for determining Chemical Resistance of Thermosetting Resins); and ASTM D2990 (Standard Methods for Tensile, Compressive, Flexural Creep, and Creep Rupture of Plastics) which are made a part thereof by such reference and be the latest edition and revision thereof. In case of conflicting requirements between this specification and these referenced documents, this specification will govern.

B Materials

B.1. General

The liner tube, resin and catalysts system shall meet the requirements defined in ASTM F1216-06, Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube.

Acceptable manufacturers for cured in place pipe (CIPP) liner include Insituform Technologies, Inc. National Liner, Inc, InLiner, USA, Inc. or an approved equal.

Prepare and submit to engineer satisfactory written certification of compliance with the ASTM and manufacturer's standards for all materials and conformance with installation methods of ASTM and the manufacturer's process.

Resin system shall be corrosion resistant polyester, vinyl ester, or epoxy system including any required catalysts, initiators, or hardeners that when cured with tubes create a composite that satisfies requirements of ASTM F1216. Prepare and submit to engineer the exact makeup of the resin including chemical resistance information, cure logs and temperatures, and the exact mixture ratio of resin and catalyst. Identify the catalyst system by product name. Resins, catalysts, and resins/catalysts mixing ratios shall not be changed during the project unless specifically approved by the engineer in writing. The resin shall produce a cured-in-place pipe that will comply with the structural and chemical resistance requirements of this specification.

The cured-in-place pipe shall be fabricated from materials which, when cured, will be able to withstand internal exposure to and corrosive effects of normal sewage effluent liquids and gases containing hydrogen sulfide, carbon monoxide, carbon dioxide, methane, dilute

sulfuric acid, and external exposure to soil bacteria and chemical attack which may be due to materials in the surrounding ground or sewage within. Corrosion resistance shall meet the requirements of ASTM F1216.

The liner shall be fabricated to a size that when installed shall neatly and tightly fit the internal circumference and length of the original pipe being rehabilitated. Allowance for circumferential and longitudinal stretching during insertion shall be made per manufacturer's standards.

Provide trained personnel by the lining manufacturer with a minimum of two years of experience for the installation of the liner.

B.2. Structural and Chemical Requirements

Submit design calculations that meet the requirements of the manufacturer and that are designed as per ASTM F1216, Appendix XI. The CIPP design shall assume no bonding to the original pipe wall. The Long-Term Flexural Modulus to be used in design shall be verified by independent testing. Such Long-Term Modulus shall not exceed 50% of the short-term values given in Section 5.3. CIPP thickness shall not be less than that which is computed from the design requirements for resin systems with physical properties shown.

Uniformly bond the layers of the cured CIPP. It shall not be possible to separate any two layers with a probe or point of a knife blade so that the layers separate cleanly, or the probe or knife blade moves freely between the layers. If separation of the layers occurs during testing of field samples, new samples will be cut from the work. Any reoccurrence may cause rejection of the work.

The cured pipe material (CIPP) shall conform to the structural properties, as listed below.

Design Requirements

MINIMUM PHYSICAL PROPERTIES			
	Test Method	Resin per ASTM F1216	Resin with 400,000 psi Properties
Modulus of Elasticity	ASTM D790	250,000	400,000 psi
Flexural Stress	ASTM D790	4,500	4,000 psi
Tensile Strength	ASTM D638	3,000	3,000 psi

The CIPP shall meet the chemical resistance requirements of ASTM F1216, Appendix X2, and ASTM C581. CIPP samples for testing shall be of tube and resin similar to that proposed for actual construction. It is required that CIPP samples with and without plastic coating meet these chemical testing requirements

Submit independent third-party test results showing the short term flexural modulus of the product to be used to the construction engineer. The cost for the testing is incidental to the cured in place lining work.

C Construction

C.1 General

The contractor shall be responsible for obtaining any necessary licenses or any fees due for using the cured-in-place lining. The cost of the licenses or fees shall be included in the unit price bid for the cured-in-place lining.

The contractor shall be responsible for obtaining any necessary city, County or State permits required for the successful completion of this project. All costs for obtaining shall be included in the unit price bid for the cured-in-place lining.

Notify all residents a minimum of 24-hours prior to service disruption. The maximum time sanitary laterals can be without service shall not exceed 12-hours

The contractor shall install cured-in-place lining with the requirements and recommendations of the product manufacturer for the conditions present at the site.

If the contractor damages the sewer during construction and is unable to complete the lining in a satisfactory manner, the contractor shall bear all costs associated with the dig- up and/or repair of the existing sewer damaged. No extra payment shall be made for this work.

Dye testing shall be performed if unknown sanitary laterals are encountered that may or may not be shown on the plans to determine whether a specific lateral is to be reconnected. Dye testing is incidental to this item.

C.2 Bypass

Provide for bypassing of flow around sections of pipe designated for repair. Plugging the line at an existing upstream manhole and pumping the flow into a downstream manhole or adjacent system shall accomplish the bypass. The pumps and bypass lines shall be of adequate capacity and condition to accommodate the sewage flow plus the additional flow that may occur during wet weather. Submit method of sewage bypass including equipment and flow controls to the engineer for approval prior to installation of bypass.

All equipment used in bypass must be operated and maintained in proper running condition at all times. Pumping system hoses and appurtenances shall be tested prior to use in the sewer system to ensure watertightness. No leakage is allowed to the surface.

Maintain sewer service throughout the duration of the work. Sewer service can be maintained via bypass pumping as necessary. Sewage or jetting water shall not be allowed to back up into basements. If the sewage backups occur as a result of the contractor operations during construction, the contractor shall bear all costs associated with the clean-up and/or repair of the resulting damage. No extra payment shall be made for this work.

Following acceptance of installation work and testing, remove and legally dispose of debris resulting from work and unused materials from the site.

Televising should occur prior to, during, and following sewer rehabilitation as described in this specification. The cost of all televising is included in the unit bid price for the cured-in-place lining.

C.3 Cleaning

Prior to the installation of the cured-in-place lining clean the pipeline according to ASTM F1216. Remove all internal debris, solids, roots, mineral deposits and protruding taps from the inside walls of the sewer to reach a minimum of 95% of the original carrying capacity and as required for any future televising or rehabilitation procedures. The debris, solids, roots, mineral deposits and protruding taps shall be removed to the extent that they do not interfere with the lining achieving its maximum strength. In no case shall mineral deposits or protruding taps extend into the pipes over 1/8 inches. Do not damage the existing sewers while removing the mineral deposits or protruding taps. Contractor shall not damage the existing sewers while cleaning the pipeline. The cost of mineral deposit or protruding tap removal shall be included in the unit price bid for the cured-in-place lining.

Any material, including mineral deposits displaced from the sewer by jet-cleaning, air/water blasting and protruding tap removal, shall be removed from the sewer. Under no circumstances will chemical cleaning be allowed. The contractor shall be responsible for disposing of the removed materials at a Department of Natural Resources (DNR) approved site. The cost of this shall be included in the unit price bid for the cured-in-place lining. The contractor shall clean the inner surface of the sewer by air, water or sand blasting in order to prepare the sewer for the cured-in-place lining. The cost of all work necessary to prepare the sewer for the installation of the lining shall be included in the unit price bid for the cured-in-place lining.

C.4 Preparation

Prior to the installation of the cured-in-place liner, inspect the sewer designated to receive the liner according to ASTM F1216. Inspection of pipelines shall be performed by experienced personnel trained in locating breaks, obstacles and service connections by close circuit television. The interior of the pipeline shall be carefully inspected to determine the location of any conditions which may prevent proper installation of cured- in-place pipe into the pipelines, and it shall be noted so that these conditions can be corrected. Confirm the locations of all branch service connections prior to installing and curing the cured-in-place pipe. Structural defects such as cracks, concrete spalling, missing brick, protruding service connection, dropped joint, any open holes or other sources of the ground water infiltration that could negatively impact the integrity of the liner shall be repaired at these locations with proven construction methods approved by the construction engineer. The cost of this repair shall be included in the unit price bid for the cured-in-place lining.

All connections for building sewers and drains of record have been shown on the plan. Prior to installation of the cured-in-place liner pipe, field verify by Closed Circuit TV (CCTV) that all active sewer connections have been identified and that only active or proposed sewer connections are to be reestablished. The operator must be NASSCO Pipeline Assessment Condition Procedure (PACP©) certified. The television camera shall be equipped with a rotating head to allow for positive identification of active building services and drains. Provide the engineer with a copy of the video exam and written report according to NASSCO PACP© standards at least one week prior to the scheduled lining operations. The engineer will promptly review the exam for any discrepancies between the video exam and the plan.

The lateral service connections shall be televised and videotaped during initial televising to assist in determining if the service is active.

C.5 Installation

Install cured-in-place pipe (CIPP) formed by the insertion of a resin-impregnated flexible felt tube, saturated with a thermosetting resin, installed into the existing pipeline and cured into a hard impermeable cured-in-place pipe. When cured, the cured-in-place pipe shall extend from end to end in a continuous tight fitting watertight pipe-within-a-pipe.

The tube shall be impregnated with resin according to ASTM F1216, D5813, and manufacturer's standards. The quantity of resin used for tube impregnation shall be sufficient to fill the volume of air voids in the tube with additional allowances for polymerization shrinkage and the potential loss of resin during installation through cracks and irregularities in the original pipe wall, as applicable. Designate a location where the uncured resin in the original containers and the unimpregnated fabric tube will be

vacuum impregnated prior to installation. No liners on the project shall be "wet out" more than 72 hours prior to installation.

The resin impregnated fabric tube shall be inserted through an existing manhole or other approved access according to ASTM and manufacturer's recommendations. Steps in existing manholes may interfere with the installation of the lining. Any manhole steps that interfere with the lining installation shall be removed. The cost of removing and replacing the manhole steps shall be included in the unit price bid for the cured-in-place lining. Care shall be taken during the insertion process to avoid overstressing of the fabric materials. Use of a lubricant during the insertion is allowed according to the manufacturer's recommendations to reduce friction. The lubricant shall be nontoxic, unable to support bacterial growth, and shall not adversely affect the fluid to be transported. Such lubricant shall be in a container clearly marked as to its contents. The cured-in-place lining shall be placed through the spring line in the existing manholes.

After installation of the liner is completed and a temperature calibration mechanism is inserted, cure the liner in strict accordance to ASTM F1216 and manufacturer's standards.

Cool the finished cured-in-place pipe to specified temperature in strict accordance to ASTM F1216 and manufacturer's standards before relieving the internal pressure in the cured-in-place pipe. Care shall be taken in the release of the static head such that a vacuum will not be developed that could damage the newly installed cured-in-place pipe.

Provide physical proof of reopening pieces at each lateral. Reopening pieces should not be remain in the sanitary sewer system.

C.6 Rehabilitation Televising

- a. Televising, with videotaping, shall be performed during chemical sealing-seal specific, chemical sealing-seal service connection, sewer lining-spot liner, and sewer lining -lateral reinstatement. televising of the entire rehabilitation operation will not be required. Televising of lateral reinstatement to observe the cutter shall be conducted.
- b. Televising and record keeping, with videotaping, of sewer reaches or sections of sewer to be rehabilitated shall be performed.
- c. Televising, with videotaping, of protruding tap cutting shall be performed wherever possible during tap cutting. Televising of the entire cutting operation will not be required. Following cutting, the tap periphery and the inside of the service lateral shall be televised and recorded.
- d. Following completion of rehabilitation, televise and videotape each sewer reach where rehabilitation was completed. Record keeping shall be as specified in subpart Inspection and Reporting.

C.7 Inspection and Reporting

Televise sanitary sewer post installation of the cured-in-place lining. All defects discovered during the post-installation television inspection shall be corrected and the sewer shall be re-televised. Provide the City of Monona with three copies of the post installation digital examination and report of the sewer within one week of completion of the televising. These record exams will become the property of the City of Monona. Televising is incidental to the cured-in- place lining bid item.

The following information shall be included in the reporting:

- Printed records shall include the following:
 - a. Street or easement location.
 - b. Upstream and downstream manhole numbers.
 - c. Approximate depth of sewer to the nearest 0.1 foot.
 - d. Overall length of sewer.
 - e. Nominal inside diameter of sewer.
 - f. Type of sewer pipe material (include color of pipe).
 - g. Pipe joint spacing within 1/2-foot accuracy.
 - h. Unusual observations in manholes.

- 2. Printed location records shall clearly show the exact location, in relation to adjacent manholes, of each point of infiltration, inflow, or pipe defect discovered.
 - a. Defects shall be referenced according to a clockwise orientation. Where offset or sheared joints are encountered, the amount of vertical or horizontal displacements shall be noted.
 - b. Service connections shall be noted.
 - Wye, tee, or break-in type connection shall be noted.
 - (2) Clockwise orientation shall be noted.
 - (3) Size of pipe shall be noted.
 - (4) Presence of a plug or an active lateral pipe shall be noted.
 - c. Where cracks are observed, they shall be noted and include:
 - Type of crack shall be noted.
 - (a) Longitudinal.
 - (b) Spiral.
 - (c) Circular.
 - (d) Multiple.
 - (e) Collapsed pipe.
 - (2) Displacement of any pipe or opening of crack shall be noted.
 - (a) Where roots are observed, the percentage of root growth in relation to the pipe opening shall be noted.
 - (b) Scale, corrosion, soap, and grease shall be noted and include:
 - (1) Heavy.
 - (2) Medium.
 - (3) Light.
 - (4) Clockwise orientation or amount of pipe wall covered.
 - (c) Infiltration or inflow observed shall include:
 - (1) Clockwise orientation.
 - (2) Estimate of amount of flow in gallons per minute.
 - (d) Any other unusual conditions observed shall be reported.
- Video shall include the following information:
 - (1) Visual (on screen):
 - (a) Date of televising.
 - (b) Sewer reach between manholes.
 - (c) Direction of flow and direction of televising.
 - (d) Continuous distance along reach.
 - (2) Audio:
 - (a) Date of television inspection, operator name, name of overlying or adjacent street, and manhole numbers.
 - (b) Confirmation of sewer reach and televising direction in relation to direction of flow.
 - (c) Description of pipe size, type, and pipe joint length.
 - (d) Description and location of each service connection and pipe defect.
 - (e) Type of weather during televising.

D Measurement

The department will measure Sanitary Sewer Lining 8-Inch Cured-In-Place by the linear foot of pipe in place measured along the top centerline of the casing, 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.0090.26

Sanitary Sewer Lining 8-Inch Cured-In-Place

LF

Payment is full compensation for furnishing the pipe liner tube, resin, catalysts system, lubricants; for cleaning and disposal of any debris and correcting structural deficiencies of existing pipe prior to installation of the lining; removing and replacing manhole steps; installing the lining; for sheeting, shoring, bracing, excavations, dewatering; for removing shoring, removing sheeting, removing bracing; for backfilling; for sewage bypass pumping; for furnishing and installing all testing equipment and materials; for televising; and for site cleanup work.

138. Furnish & Install 6-Inch Pipe & Fittings, Item SPV.0090.27; Furnish & Install 8-Inch Pipe and Fittings, Item SPV.0090.28; Furnish & Install 10-Inch Pipe and Fittings, Item SPV.0090.29; Furnish & Install 12-Inch Pipe and Fittings, Item SPV.0090.30.

A Description

Furnish, install and test new water main and fittings. Work for this item also includes:

- 1. Thrust restraints.
- 2. Temporary flushing devices (blow-offs and/or temporary hydrants).
- 3. Polyethylene encasement.
- 4. Temporarily raising or lowering existing water services.
- 5. Exposing existing water main to verify location and depth.
- 6. Concrete and asphalt pavement removal.
- 7. Restoring the site.

B Materials

Refer to Article 702 of the City Standard Specifications and this section.

All materials necessary to perform the work, including:

- 1. Pipe and accessories.
- 2. Fittings and accessories.
- 3. Sleeves, clamps, tie rods, plugs.
- 4. Thrust blocking and/or restrained-joint gaskets.
- 5. Polyethylene encasement.
- 6. Bedding material to cover the pipe.

Temporary blow-off devices:

- 1. Temporary 2-inch diameter flushing/blow-off devices will be permitted on 8-inch or smaller mains provided they are assembled according to SDD 7.07 2-IN TEMPORARY FLUSHING / BLOW-OFF FOR 8-IN PIPE AND SMALLER.
- 2. Plastic tubing or other flexible tubing materials are not permitted.
- 3. Terminate blow-off device at least 2-4-feet above ground with a ball valve and a 2 $\frac{1}{2}$ -inch brass NST fire-hose connection.

C Construction

Refer to Article 703 the City Standard Specifications and this section.

Pipe Laying and Bedding:

- 1. Pipes with a minimum of 6-feet and a maximum of 7-feet of cover from final grade.
- 2. For line or grade adjustments of 24-inches or less, use offsets in lieu of bend fittings.
- Inspect all pipe and fittings for damage and cleanliness prior to lowering into the trench. Any costs due to the repair of damaged valves and hydrants caused by sand or silt in the pipe will be assessed.
- 4. Never roll or push the pipe into the trench from the bank. Always lower the pipe into the trench using mechanical equipment.
- 5. Do not place chlorine in a pipe during installation that will not be filled and flushed within 45 days of installation.
- 6. Restore any disturbed turf areas associated with any water main or service lateral installation located in roadway terraces. The restoration is considered incidental to the service lateral work.

Slip Joints:

- 1. A slip joint is made by compressing a rubber gasket between a bell cast in the end of one pipe and the plain end of the pipe to be joined.
- 2. Assemble according to AWWA C600 latest revision, including:
- 3. Thoroughly clean the groove and the bell socket of the pipe or fitting, and the plain end of the mating pipe.
- 4. Using a clean gasket of the proper design for the joint to be assembled, make a small loop in the gasket and insert it in the socket, making sure the gasket faces the correct direction and that it is properly seated.
- 5. Apply lubricant to the gasket and plain end of the pipe according to ANSI/AWWA C111/A21.11 latest revision. Only use lubricant supplied by the pipe manufacturer.
- 6. Be sure that the plain end of the pipe is beveled, as square or sharp edges may damage or dislodge the gasket and cause a leak.
- 7. Push the plain end into the bell of the pipe, keeping the joint straight while pushing.
- 8. Deflect the pipe as required only after the joint is assembled.
- 9. Connect the bonding straps after the pipe is in place to ensure conductivity across the joint.

D Measurement

The department will measure Furnish and Install (Size) Pipe & Fittings, by linear feet, to the nearest half foot for each size (diameter) of pipe installed, measured along the centerline of the pipe, from center to center of valves and fittings. No deductions from the measured lengths for fitting installations.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.27	Furnish and Install 6-Inch Pipe & Fittings	LF
SPV.0090.28	Furnish and Install 8-Inch Pipe & Fittings	LF
SPV.0090.29	Furnish and Install 10-Inch Pipe & Fittings	LF
SPV.0090.30	Furnish and Install 12-Inch Pipe & Fittings	LF

Payment is full compensation for excavation of the trench, except tunneling and jacking; installation and removal of sheeting and bracing; removal of water from the trench; disposal of surplus material from the trench; backfilling the trench and compaction of the backfill material; embankment over the main using surplus material from the excavation of the trench; bedding the pipe; laying the pipe and installing the fittings and accessories; jointing and sealing of joints in pipe, fittings and accessories; encasement, where specified; connections to existing structures; temporary flushing hydrants and/or blow-offs; testing and cleaning out the main; and restoring the site. for temporary flushing hydrants and/or blow-offs will be considered only if subsequently required as a result of plan revisions issued by the engineer:

139. Sawed in Bicycle Loop Detection, Item SPV.0090.31.

A Description

This special provision describes the process for sawing in slots for bicycle loop detection, furnishing and installing bicycle loop detector wires, and sealing bicycle loop detectors in existing concrete pavement.

B Materials

B.1 Loop Detector Wires

Furnish and install loop detector wires conforming to standard spec 655.0800. Use 3 passes for each detection zone.

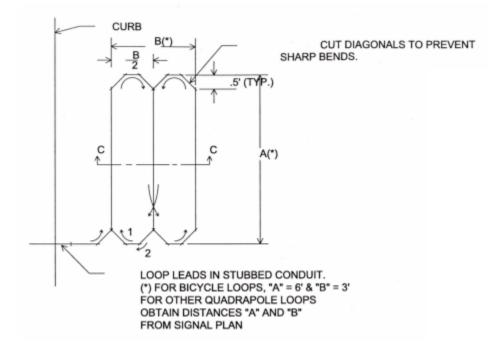
B.2 Sealant

Provide a flowable polyester sealant designed for traffic loop detectors. The sealant shall be self-leveling, flowable to allow the sealant to cover the loop within the slot, shall be rated for exterior use, shall be applicable to concrete and asphalt applications, and shall be gray in color.

C Construction

The contractor shall saw slots into the concrete to a width no larger than 0.25 inch wide, and no deeper than 2.25 inches deep. There shall be a minimum of 1.5" of depth from the top of the detection wire to the surface of the concrete pavement.

The dimensions, and shape of the bicycle detection zone is shown below.



The contractor shall apply the sealant as previously described per the manufacturer's guidance, and finish flush with the surface, cleaning off any excess from the concrete.

D Measurement

The department will measure Sawed in Bicycle Loop Detection, by the linear foot of the cut including all work necessary to saw slot, furnish and install loop detector wire, and seal loop detector wire. Note the measurement of sawing will not match the measurement of detection wire.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.31	Sawed in Bicycle Loop Detection	LF

Payment is full compensation for sawing slots for bicycle loop detectors, furnishing and installing loop detector wire, and sealing bicycle loop detectors once detector wires have been installed, and loops verified working.

140. Thermoplastic Retroreflective Pavement Marking, 4-Inch, Item SPV.0090.32; Thermoplastic Retroreflective Pavement Marking, 6-Inch, Item SPV.0090.33.

A Description

This work consists of furnishing and installing a durable, high skid and slip resistant 6-inch white retroreflective preformed thermoplastic linear pavement marking for use on asphalt or Portland cement concrete pavement surfaces.

B Materials

General

Preformed thermoplastic pavement marking to be produced of the materials and by methods described below as manufactured by Ennis-Flint or approved equal.

The marking material must be produced in the United States, and the manufacturer must be ISO 9001:2008 certified for design, development and manufacturing of preformed thermoplastic pavement markings, and provide proof of current certification.

The material shall be capable of being applied on bituminous and/or Portland cement concrete pavements by the use of a handheld heat torch, and/or infrared heater without preheating the surface.

The material shall be capable of being applied in temperatures down to 45°F (7.2°C) without any special storage, preheating or treatment of the material before application.

The material must be a resilient light green color preformed thermoplastic product which contains a minimum of thirty percent (30%) intermixed anti-skid/anti-slip elements with a hardness range of 7-9 (Mohs scale), and where the top surface contains anti-skid/anti-slip elements with a hardness of 9 (Mohs scale).

Material shall be composed of an ester-modified rosin impervious to degradation by motor fuels, lubricants, etc., in conjunction with aggregates, pigments, binders, and anti-skid/anti-slip elements uniformly distributed throughout the material. The thermoplastic material shall conform to AASHTO designation M249, with the exception of the relevant differences due to the material being supplied in a preformed state, being non-reflective, and being of a color different from white or yellow.

Pigment Color

The bike lane green color shall be manufactured with appropriate pigment to ensure that the resulting colors complies with the Light Green color as specified in the FHWA Memorandum dated April 15, 2011: Interim Approval for Optional Use of Green Colored Pavement for Bike Lanes (IA-14).

The pigment system must not contain heavy metals or any carcinogen, as defined in 29 CFR 1910.1200 in amounts exceeding permissible limits as specified in relevant Federal Regulations.

Heating Indicators

The top surface of the material shall have regularly spaced indents. The closing of these indents during application shall act as a visual cue that the material has reached a molten state, allowing for satisfactory adhesion and proper embedment of the anti-skid/anti-slip elements, and a post-application visual cue that proper application procedures have been followed.

Skid Resistance

The surface of the preformed thermoplastic material shall contain factory applied anti-skid elements with a minimum hardness of 9 (Mohs scale). Upon application, the material shall provide a minimum skid resistance value of 60 BPN when tested according to ASTM E 303.

Slip Resistance

The surface of the preformed thermoplastic material shall contain factory applied anti-skid elements with a minimum hardness of 9 (Mohs scale). Upon application the material shall provide a minimum static coefficient of friction of 0.6 when tested according to ASTM C 1028 (wet and dry), and a minimum static coefficient of friction of 0.6 when tested according to ASTM D 2047.

Thickness

The material must be supplied at a minimum thickness of 90 mils (2.29 mm) or 125 mils (3.15 mm).

Environmental Resistance

The material shall be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to oil and gasoline.

C Construction

Install 6-inch preformed thermoplastic white retroreflective line according to manufactures specifications.

Performance Requirements

Preformed thermoplastic white retroreflective lines shall be installed per plans and specification. The engineer will notify the contractor within 48 hours of installation regarding any lines that are not installed to specification or to the satisfaction of the engineer. Non-conforming lines shall be removed at no charge to the city and replaced with a conforming product.

D Measurement

The department will measure Thermoplastic Retroreflective Pavement Marking, (Size) 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.0060.32	Thermoplastic Retroreflective Pavement Marking, 4-Inch	LF
SPV.0060.33	Thermoplastic Retroreflective Pavement Marking, 6-Inch	LF

Payment for this work, measured as provided above, will be made under at the contract unit price per linear foot of preformed thermoplastic retroreflective line, including any re-application or repair required under the performance requirements.

141. Wall Modular Block Gravity R-13-336, Item SPV.0165.01.

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.

B Materials

B.1 Proprietary Wall Systems

The supplied wall system must be from the department's approved list of Modular Block Gravity 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 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 $8 \frac{1}{2}$ 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 shall be designed for a minimum live load surcharge of 100 psf according to Chapter 14 of the WisDOT LRFD Bridge Manual or as shown 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. Internal stability shall also be considered at each block level. Calculations for factored stresses and resistances shall be based upon assumed conditions at the end of the design life. The width of the modular block (front face to back face) shall be included in the design computations and shown on the wall shop drawings. Blocks must have a minimum width of 23 inches. Block widths may vary among courses but shall consist of only a single block. 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 program 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 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 of the block shall closely match the color of the cut limestone boulders located at Structure B-13-864 over the Starkweather Creek along Atwood Avenue between Station 32+00, RT and Station 33+00, RT. The front, top, and exposed edges of the blocks shall have one of the following patterns or an approved equal:

<u>Product Name</u> <u>Pattern</u>

Recon Le Sueur County Limestone

Redi-Rock Limestone

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.

Block dimensions may vary no more than ±1/8 inch from the standard values published by the manufacturer. Blocks must have a minimum width (front face to back face) of 23 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 1¾ inches. The front face of the blocks shall conform to plan requirements for color, texture, or patterns.

Prior to delivery of any manufactured block, a sample test block shall be delivered to the project site along with the needed test blocks for the landscaping wall and provided to the engineer and the City of Madison for comparison and approval of color, texture and pattern. Andy Zwieg at azwieg@cityofmadison.com, telephone (608) 266-9219 is the point of contact for the City of Madison.

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

- [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 Size No. 1 as given in standard spec 501.2.5.4. 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.

A layer of Geotextile Type "DF" (Schedule B) shall be placed vertically between the backfill and the Type A backfill. The geotextile shall extend from the top of the leveling pad to 6 inches below the surface of the retained soil. The geotextile shall then wrap across the top of the Type A backfill to the back of block wall facing.

Backfill placed between retained soil and Type A backfill shall comply with the requirements for Granular Backfill Grade 1 as contained in standard spec 209.2.2. The contractor may substitute Type A Backfill for Granular Backfill Grade 1.

C Construction

C.1 Excavation and Backfill

Excavation and preparation of the foundation for the wall and the leveling pad shall be according to standard spec 206. 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 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.

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.

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.

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.

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 straight edge. 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.4 Geotechnical Information

Geotechnical data to be used in the design of the wall is given on the wall plan. After completing wall excavation, 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 Gravity 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 NUMBERDESCRIPTIONUNITSPV.0165.01Wall Modular Block Gravity R-13-336SF

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.

142. Cut-Stone Boulders, Item SPV.0165.02.

A Description

This special provision describes work consisting of furnishing and placing cut-stone boulders according to the requirements of the plans and these specifications.

B Materials

Provide stone for cut-stone boulders of durable quarry dolomitic limestone of approved quality that are sound, hard, dense, resistant to the action of air and water, and free from seams, cracks, or other structural defects.

Provide stone pieces for cut-stone boulders that are rectangular in shape and approved by the engineer with dimensions as shown on the plans and meet the following minimum criteria:

- Snapped/natural on front, top and exposed sides
- Sawed or snapped on unexposed sides, backs, and bottom
- Water Absorption (ASTM C97): 0.66%
- Density (ASTM C97): 173 pcf
- Modulus of Rupture (ASTM C99): 1450 psi
- Compressive Strength w/ Rift (ASTM C170): 20,000 psi
- Compressive Strength across Rift: 28,000 psi

C Construction

Properly trim and shape the bed for the cut-stone boulders in a stair-step configuration as shown on the plans.

Cut-stone boulders shall be placed in an offset pattern such that vertical seams between stones do not horizontally align from one vertical layer of stone to the next.

Place cut-stone boulders by any mechanical means that will produce a completed job within reasonable tolerances of the typical section shown on the plans. Firmly set each cut stone boulder with no rocking or tipping providing a firm foundation for subsequent layers. Unless otherwise provided on the plans, provide cut-stone boulders not less than 8 inches thick. Limit hand work to the amount necessary to fill large voids or to correct segregated areas. Conform to the requirements of standard spec 645.3.1.7 for the placement of cut-stone boulders over clear stone and geotextile fabric - Type HR. Do not place cut-

stone boulders against or in contact with any concrete masonry surface prior to the expiration of the curing and protection period for the concrete.

Cut-stone boulders shall be placed at the plan elevations and locations regardless of existing water levels. Provide dewatering and protection of the work area as required for proper installation.

Where storm sewer installations are required within the limits of the cut-stone boulder limits, coordinate the work schedule to ensure proper staging of operations.

D Measurement

The department will measure Cut-Stone Boulders by the square foot of vertical face, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0165.02Cut-Stone BouldersSF

Payment is full compensation for excavation and preparation of the bed, including backfilling and disposal of surplus material; for furnishing and placing cut-stone boulders; and for restoring the site of the work.

The department will pay separately for the clear stone and geotextile fabric under the cut stone boulders.

143. High Friction Colored Surface, Green, Item SPV.0165.03.

A Description

This work consists of furnishing and installing a durable, high skid and slip resistant preformed thermoplastic bike lane green pavement marking material for use on asphalt or Portland cement concrete pavement surfaces.

B Materials

General

Preformed thermoplastic pavement marking to be produced of the materials and by methods described below as manufactured by Ennis-Flint or approved equal.

The material must be produced in the United States, and the manufacturer must be ISO 9001:2008 certified for design, development, and manufacturing of preformed thermoplastic pavement markings, and provide proof of current certification.

The material shall be capable of being applied on bituminous and/or Portland cement concrete pavements by the use of a handheld heat torch, and/or infrared heater without preheating the surface.

The material shall be capable of being applied in temperatures down to 45°F (7.2°C) without any special storage, preheating or treatment of the material before application.

The material must be a resilient light green color preformed thermoplastic product which contains a minimum of thirty percent (30%) intermixed anti-skid/anti-slip elements with a hardness range of 7-9 (Mohs scale), and where the top surface contains anti-skid/anti-slip elements with a hardness of 9 (Mohs scale).

Material shall be composed of an ester-modified rosin impervious to degradation by motor fuels, lubricants, etc., in conjunction with aggregates, pigments, binders, and anti-skid/anti-slip elements uniformly distributed throughout the material. The thermoplastic material shall conform to AASHTO designation M249, with the exception of the relevant differences due to the material being supplied in a preformed state, being non-reflective, and being of a color different from white or yellow.

Pigment Color

The bike lane green color shall be manufactured with appropriate pigment to ensure that the resulting colors complies with the Light Green color as specified in the FHWA Memorandum dated April 15, 2011: Interim Approval for Optional Use of Green Colored Pavement for Bike Lanes (IA-14).

The pigment system must not contain heavy metals or any carcinogen, as defined in 29 CFR 1910.1200 in amounts exceeding permissible limits as specified in relevant Federal Regulations.

Heating Indicators

The top surface of the material shall have regularly spaced indents. The closing of these indents during application shall act as a visual cue that the material has reached a molten state, allowing for satisfactory adhesion and proper embedment of the anti-skid/anti-slip elements, and a post-application visual cue that proper application procedures have been followed.

Skid Resistance

The surface of the preformed thermoplastic material shall contain factory applied anti-skid elements with a minimum hardness of 9 (Mohs scale). Upon application, the material shall provide a minimum skid resistance value of 60 BPN when tested according to ASTM E 303.

Slip Resistance

The surface of the preformed thermoplastic material shall contain factory applied anti-skid elements with a minimum hardness of 9 (Mohs scale). Upon application the material shall provide a minimum static coefficient of friction of 0.6 when tested according to ASTM C 1028 (wet and dry), and a minimum static coefficient of friction of 0.6 when tested according to ASTM D 2047.

Thickness

The material must be supplied at a minimum thickness of 90 mils (2.29 mm) or 125 mils (3.15 mm).

Environmental Resistance

The material shall be resistant to deterioration due to exposure to sunlight, water, salt or adverse weather conditions and impervious to oil and gasoline.

C Construction

Install preformed thermoplastic pavement marking according to manufacturer's specifications.

Performance Requirements

Symbols with background shall be installed per plans and specification. The engineer will notify the contractor within 48 hours of installation regarding any symbols with background that are not installed to specification or to the satisfaction of the engineer. Non-conforming symbols with background shall be removed at no charge to the city and replaced with a conforming product.

D Measurement

The department will measure High Friction Colored Surface, Green by the square 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.0165.03

High Friction Colored Surface, Green

SF

Payment is full compensation for all work, materials, labor, and incidentals required to complete the work as specified, including any re-application or repair required under the performance requirements as provided herein.

144. Pavement Cleanup, Item SPV.0170.01.

A Description

This special provision describes cleanup of dust and debris from pavements within and adjacent to the job site.

B Materials

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 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. Payment includes sidewalk and pathway adjacent to the 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.0170.01

Pavement Cleanup

STA

Payment is full compensation for surveillance, mobilization, sweeping, and disposing of materials.

145. Raised Concrete Crosswalk, Item SPV.0180.01.

A Description

The work under this item shall consist of manually forming and pouring concrete speed humps in accordance as detailed in the plans. All dowel bars shall be epoxy coated and according to the standard specifications. All concrete curb and gutter adjacent to the raised crosswalk shall be paid for separately under that associated bid item. Positive drainage shall be maintained in the flowline of all curb and gutter adjacent to the raised crosswalks. Dowelling of curb and gutter for raised crosswalk installation shall be considered incidental to Raised Concrete Crosswalk. Staking crosswalk layout shall be considered incidental to Raised Concrete Sidewalk.

B (Vacant)

C Construction

Raised Concrete Crosswalk shall be constructed at the location and to the dimensions as shown in the plans. The crosswalks shall be poured in sections in order to maintain traffic flow. The raised concrete crosswalks shall comply with all applicable sections of standard spec 415, pertaining to Non-Reinforced Concrete Pavement, Doweled. Raised Concrete Crosswalks shall be doweled with epoxy coated dowels as shown on the detail drawing. It is anticipated that the Raised Concrete Crosswalks will be hand formed and no additional compensation shall be given for any labor required to form the crosswalks to the dimensions shown on the details.

D Measurement

The department will measure Raised Concrete Crosswalks by the square yard, acceptably completed.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT

SPV.0180.01 Raised Concrete Crosswalk SY

Payment is full compensation for square yard of crosswalk installed and for furnishing all labor, tools, materials, reinforcing, equipment, and incidentals necessary to complete the work.

146. Shredded Hardwood Bark Mulch, Item SPV.0180.02.

A Description

This special provision describes furnishing and placing Shredded Hardwood Bark Mulch at the location shown on the plans and according to standard spec 632 and as hereinafter provided.

B Materials

Shredded Hardwood Bark Mulch shall be finely shredded hardwood bark mulch and shall be the product of a mechanical chipper, hammermill, or tub grinder. The material shall be fibrous and uniformly colored to match the existing bark mulch within the area, free of large wood chunks, and shall be substantially free of mold, dirt, sawdust, and foreign material. No portion of the material shall be in an advanced state of decomposition. The material shall be free of material detrimental to healthy plant growth, not contain chipped up manufactured boards or chemically treated wood, including but not limited to wafer board, particle board, chromated copper arsenate (CCA) or penta-treated wood and not contain color dyes. The material shall contain no bark of the black walnut tree. The material shall be 1/8" nominal thickness, with at least 50 percent having an area of not less than 1 sq. inch. The maximum length of individual pieces shall not exceed 2 inches.

C Construction

Install mulch according to standard spec 632.3.9 to a depth of 3 inches. Pull back mulch no less than 3" and no more than 6" from any tree trunk.

D Measurement

The department will measure Shredded Hardwood Bark Mulch by the square yard of surface area, acceptably completed.

E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

SPV.0180.02.

Shredded Hardwood Bark Mulch

SY

Payment is full compensation for furnishing and installing all materials.

147. Planting Mix Topsoil, Item SPV.0180.03.

A Description

Under this specification for planting soil mix, the contractor shall furnish and place the soil for the landscape beds in the location and manner specified in the plans and the pertinent provisions of standard spec 625 and 632. Work includes the excavation of existing material and placing the soil mix.

B Materials

Planting Mix Topsoil shall be a mix of 2:1:1 pulverized and/or shredded general use topsoil (as described below), sand and compost respectively. Planting mix shall be thoroughly mixed off-site before spreading. Planting Mix Topsoil shall be used for **non-turf non-infiltration** projects, e.g., landscaped areas, terraces that are to be planted with native seed mix or edible plantings, or special projects defined by the engineer.

<u>Turf/General Use Topsoil</u> shall be a humus bearing soil compound of <70% silt, <70% sand, and <30% clay. Topsoil shall be adapted to the sustenance of plant life and commonly known as black dirt. Toposil shall be free of noxious/invasive weeds, stones, debris, and vegetable material, and free of excess peat, sand, or clay. Topsoil used in street terraces and on the property side of sidewalk shall be pulverized and/or shredded.

C Construction

Remove compacted base from within 6 inches of curbs and pavement of planting beds. Loosen subgrade of planting beds to a minimum depth of 18 inches. Remove stones larger than 1 inch in any dimension and sticks, roots, rubbish, and other extraneous matter. Thoroughly blend planting soil mix off-site before spreading. Do not spread if planting soil or subgrade is frozen, muddy or excessively wet. Spread approximately one-third the thickness of planting soil mix over loosened subgrade.

Mix thoroughly into top 6 inches of subgrade. Spread planting soil mix, in maximum of 6-inch lifts, to a depth shown in plans but not less than required to meet finish grades after natural settlement. Grade planting beds to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

D Measurement

The department will measure Planting Soil Mix by the square yard, acceptably completed.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0180.03Planting Mix TopsoilSY

Payment is full compensation for furnishing and placing all materials, including excavation of but not limited to existing planter material, disposal, hauling, placing, edging, grading

148. Construct Inside Drop, 6-Inch, Item SPV.0200.01; Construct Inside Drop, 8-Inch, Item SPV.0200.02.

A Description

This special provision describes constructing outside drop structures on sanitary sewer access structures where shown in the drawings, or as directed by the City of Madison. Outside and Inside Drops are required if the elevation difference between the flow line of the incoming pipe and the springline of the outgoing pipe is greater than 2 feet. The detail drawing in the city specification Standard Detail Drawing 5.7.30 indicates that the inside drop can only be used for 6" diameter or smaller pipe. Please disregard this. The intent is to build the Inside Drop Connection with 8" diameter pipe.

B Materials

Provide all materials associated with this item according to Standard Detail Drawing 5.7.30 and Article 507.3(d)1 of the City of Madison Standard Specifications for Public Works Construction - Current Edition.

C Construction

Construct Inside Drop according to Article 507.3(d)1 of the City of Madison Standard Specifications for Public Works Construction - Current Edition.

Maintain the normal flow of wastewater at all times during installation of the sanitary sewer access structure, construction of the outside drop structure, and when connecting new and existing pipes to the structure.

Complete any necessary temporary wastewater control according to the City of Madison Standard Specifications for Public Works Construction - Latest Edition, and as described under bid item Wastewater Control item.

D Measurement

The department will be measure Construct Inside Drop by the vertical foot measured from the invert of the entry tee to the springline of the outgoing sewer according to City of Madison Standard Detail Drawing 5.7.30. If the manhole has a bench above the spring line of the outgoing sewer, the inside drop will be measured from the invert of the tee to the top of the manhole structure bench.

E Payment

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

ITEM NUMBERDESCRIPTIONUNITSPV.0200.01Construct Inside Drop, 6-InchVFSPV.0200.02Construct Inside Drop, 8-InchVF

Payment is full compensation for excavating, backfilling and disposing of surplus materials. Sanitary tap connections for the inside drop shall be considered incidental to this work.

ADDITIONAL SPECIAL PROVISION 1 (ASP 1) FOR TRANSPORTATION ALLIANCE FOR NEW SOLUTIONS (TrANS) PROGRAM EMPLOYMENT PLACEMENTS AND APPRENTICESHIPS

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Section 5204(e) – Surface Transportation Workforce Development Training and Education, provides for 100 percent Federal funding if the core program funds are used for training, education, or workforce development purposes, including "pipeline" activities. The core programs includes: Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Highway Bridge Program (HBP), Interstate Maintenance (IM), National Highway System (NHS), and Surface Transportation Program (STP). These workforce development activities cover surface transportation workers, including OJT/SS programs for women and minorities as authorized in 23 U.S.C. §140(b).

TrANS is an employment program originally established in 1995 in Southeastern Wisconsin. Currently TrANS has expanded to include TrANS program locations to serve contractors in Southeast (Milwaukee and surrounding counties), Southcentral (Dane County and surrounding counties including Rock County), and most Northeastern Wisconsin counties from locations in Keshena, Rhinelander and surrounding far Northern areas. TrANS attempts to meet contractor's needs in other geographic locations as possible. It is an industry driven plan of services to address the outreach, preparation, placement and retention of women, minorities and non-minorities as laborers and apprentices in the highway skilled trades. These candidate preparation and contractor coordination services are provided by community based organizations. For a list of the TrANS Coordinators contact the Disadvantaged Business Enterprise Office at (414) 438-4583 in Milwaukee or (608) 266-6961 in Madison. These services are provided to you at no cost.

I. BASIC CONCEPTS

contract.

Training reimbursements to employing contractors for new placements, rehires or promotions to apprentice of TrANS Program graduates will be made as follows:

1)	On-the-Job Training, Item ASP.1T0G, ASP 1 Graduate. At the rate of \$5.00 per hour
•	on federal aid projects when TrANS graduates are initially hired, or seasonally rehired, as unskilled laborers or the equivalent.
	<u>Eligibility and Duration:</u> To the employing contractor, for up to 2000 hours from the point of initial hire as a TrANS program placement.
	Contract Goal: To maintain the intent of the Equal Employment Opportunity

program, it is a goal that ____5 __ (number) TrANS Graduate(s) be utilized on this

On-the-Job Training, Item ASP.1T0A, ASP 1 Apprentice. At the rate of \$5.00 per hour on federal aid projects at the point when an employee who came out of the TrANS Program is subsequently entered into an apprenticeship contract in an underutilized skilled trade (this will include the Skilled Laborer Apprenticeship when that standard is implemented).

<u>Eligibility and Duration:</u> To the employing contractor, for the length of time the TrANS graduate is in apprentice status.

<u>Contract Goal:</u> To maintain the intent of the Equal Employment Opportunity program, it is a goal that ___2 __ (number) TrANS Apprentice(s) be utilized on this contract.

3) The maximum duration of reimbursement is two years as a TrANS graduate plus time in apprentice status.

- If a TrANS program is not available in the contractor's area and another training program is utilized, payment of On-the-Job Training hours may be approved by the Wisconsin Department of Transportation (WisDOT) if the training program meets the established acceptance criteria. Only On-the-Job Training Hours accumulated after WisDOT approval will be reimbursed as specified under Items ASP.1T0G and ASP.1T0A. For more information, contact the Disadvantaged Business Enterprise Office at the phone numbers listed above.
- 5) WisDOT reserves the right to deny payments under items ASP.1T0G and ASP.1T0A if the contractor either fails to provide training or there is evidence of a lack of good faith in meeting the requirements of this training special provision.

II. RATIONALE AND SPECIAL NOTE

The \$5.00 per hour now being paid for TrANS placements is intended to cover the duration of two years to allow for reaching entry-level laborer status. An additional incentive, the \$5.00 rate, would promote movement into the underutilized skilled trades' apprenticeships and applies until the individual completes their apprenticeship. These incentives benefit TrANS candidates by giving them a better opportunity to enter a skilled trade; benefits contractors who will be assisted in meeting their EEO profiles and goals; and benefits the public who will see the program reinforce larger public-private employment reform in Wisconsin. The pool of TrANS graduates was created for the purpose of addressing underutilization in the skilled trades, an objective that is further reinforced by a parallel retention pilot program, known as the Companywide Reporting. Whether or not reimbursement is involved, the WisDOT reassures contractors who are in the Companywide Program that TrANS placements still contribute toward fulfilling the new hire goal of 50% women and minorities. Based on data administered by United States Department of Labor (US DOL), the highway skilled trades remain underutilized for women statewide (less than 6.9%); and for minorities in all counties (% varies by county).

<u>NOTE</u>: Unless using other advancement strategies, contractors are encouraged to use some or all of this monetary incentive to offset the cut in hourly wages an individual may incur when entering an apprenticeship if the full general laborer hourly rate has been previously paid. No special accounting measures are required.

III. IMPLEMENTATION

The implementation of ASP 1 is intended to cover only the amount of time it takes for underutilization to be resolved across the trades. This will be measured annually at the county and/or state levels using data administered by WisDWD in relation to goals set by the USDOL-OFCCP. With appropriate state and federal approvals, we may also do some measurement at the company level.

It is the contractor's responsibility to note on their Certified Payrolls if their employee is a TrANS graduate or a TrANS apprentice. The District EEO Coordinators utilize the information on the Certified Payrolls to track the hours accumulated by TrANS Graduates and TrANS apprentices on WisDOT contracts. Payment under this ASP 1 is made based on the hours recorded off of the Certified Payrolls. Tracking may eventually include improved linkages with the WisDWD apprentice database, information from company and committee level sources.

TrANS is nondiscriminatory by regulation, and is a tool for optional use by contractors to address the underutilization of women and minorities as laborers and apprentices in our industry's skilled trades.

IV. TRANS TRAINING

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided to employees enrolled in apprenticeship and on-the-job training programs as follows:

The contractor shall provide on-the-job training aimed at developing full journey workers in the type of trade or job classifications involved. In the event the contractor subcontracts a portion of the contract work, the contractor shall determine how many, if any, of the trainees are to be trained by the subcontractor provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract.

Training and upgrading of minorities and women toward journey workers status is a primary objective of this training special provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority trainees and women trainees); to the extent such persons are available within a reasonable area of recruitment. The contractor will be given an opportunity and will be responsible for demonstrating the steps that they have taken in pursuance thereof, prior to determination as to whether the contractor is in compliance with this training special provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey workers status or in which they have been employed as a journey worker. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

V. APPRENTICESHIP TRAINING

The Federal Highway Administration's (FHWA) policy is to require full use of all available training and skill improvement opportunities to assure increased participation of minority groups,

disadvantaged persons and women in all phases of the highway construction industry. The FHWA On-the-Job Training (OJT) Program requires the State transportation agencies (STAs) to establish apprenticeships and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical under-representation of members of these groups in highway construction skilled crafts.

The OJT Supportive Services (OJT/SS) Program was established in Title 23 Code of Federal

Regulations (CFR), Part 230) to supplement the OJT program and support STA training programs by providing services to highway construction contractors and assistance to highway construction apprentices and trainees. The primary objectives of OJT/SS are:

- (1) To increase the overall effectiveness of the State highway agencies' approved training programs.
- (2) To seek other ways to increase the training opportunities for women, minorities, and disadvantaged individuals.

The STAs are responsible for establishing procedures, subject to the availability of Surface Transportation and Bridge Funds under 23 U.S.C. §140(b) (Nondiscrimination), for the provision of supportive services with respect to training programs approved under 23 CFR, Part 230(a) (Equal Employment Opportunity on Federal and Federal-aid Construction Contracts – including Supportive Services).

The contractor and subcontractor shall maintain records to demonstrate compliance with these apprenticeship requirements. Reasonable exemptions and modifications to and from any or all of these requirements will be determined by the Wisconsin Department of Transportation-Civil Rights Office. A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT Civil Rights Office, 4802 Sheboygan Avenue, P.O. Box 7965, Rm. 451, Madison, WI 53707.

ADDITIONAL SPECIAL PROVISION 3

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM IMPLEMENTATION

Authority

Wisconsin Department of Transportation (WisDOT) is a recipient of funds from the US Department of Transportation's Federal Highway Administration. The DBE program is a federal program applicable on all contracts administered by WisDOT that include federal-aid highway funds. The authority for the DBE program is the Transportation Bill as approved by Congress periodically. DBE program guidance and requirements are outlined in the Code of Federal Regulations at 49 CFR Part 26. This contract is subject to DBE provisions because it is financed with federal-aid-highway funds. Additionally, this contract is subject to the *State of Wisconsin Standard Specifications for Highway and Structure Construction* and all applicable contract documents.

Requirements

Pursuant to the federal DBE program regulation at 49 CFR Part 26, a contractor's failure to comply with any provision of the DBE program regulatory provisions will be considered a material breach of contract. This is nonnegotiable.

If a contractor fails to carry out the DBE program requirements and/or the Required Contract Provisions for Federal Aid Contracts (FHWA 1273) referenced in this document, sanctions will be assessed depending upon the facts, reasoning, severity, and remedial efforts of the contractor that may include: termination of contract, withholding payment, assessment of monetary sanctions, and/or suspension/debarment proceedings that could result in the disqualification of the contractor from bidding for a designated period of time.

- (1) The Commitment to Subcontract to DBE (Form DT1506 or digital submittal), Attachments A, and Good Faith Effort Documentation (Form DT1202) will be submitted as described in Section 2.
- (2) Any change to DBE Commitments thereafter must follow modification of DBE subcontracting commitment as described in Section 9.
- (3) The Department requires this list of DBE subcontractors from all bidders at time of bid to ensure the lowest possible cost to taxpayers and fairness to other bidders and subcontractors. Bid shopping is prohibited.
- (4) The contractor must utilize the specific DBE firms listed in the approved DBE Commitment to perform the work and/or supply the materials for which the DBE firm is listed unless the contractor obtains written consent in advance from WisDOT. The contractor will not be entitled to payment for any work or materials on the approved DBE Commitment that is not performed or supplied by the listed DBE without WisDOT's written consent.

Description

The Wisconsin Department of Transportation is committed to the compliant administration of the DBE Program. The DBE provisions work in tandem with FHWA 1273 and WisDOT's *Standard Specifications for Highway and Structure Construction* and *Construction and Materials Manual*. The WisDOT Secretary is signatory to assurances of department-wide compliance.

The Department assigns the contract DBE goal as a percentage of work items that could be performed by certified DBE firms on the contract. The assigned DBE goal is expressed on the bid proposal as a percentage applicable to the total contract bid amount.

(1) WisDOT identifies the assigned DBE goal in its contract advertisements and posts the contract DBE goal on the cover of the bidding proposal. The contractor can meet the assigned contract DBE goal by subcontracting work to a DBE firm or by procuring services or materials from a DBE firm.

- (2) Under the contract, the prime contractor should inform, advise, and develop participating DBE firms to be more knowledgeable contractors who are prepared to successfully complete their contractual agreement through the proactive provision of assistance in the following areas:
 - Produce accurate and complete quotes
 - Understand highway plans applicable to their work
 - Understand specifications and contract requirements applicable to their work
 - Understand contracting reporting requirements
- (3) The Department encourages contractors to assist DBE subcontractors more formally by participating in WisDOT's Business Development program as a mentor, coach, or resource. For comprehensive information on the Disadvantaged Business Enterprise Program, visit the Department's Civil Rights and Compliance Section website at: http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx

1. Definitions

Interpret these terms, used throughout this additional special provision, as follows:

- a. Assigned DBE Contract Goal: The percentage shown on the cover of the Highway Work Proposal that represents the feasible level of DBE participation for each contract. The goal is calculated using the Engineer's Estimate and DBE Interest Report. Goal assignment includes review of FHWA funds, analyzes bid items for subcontract opportunity and compatibility with DBE certified firm work codes. Additional factors considered include proximity, proportion, and regulations.
- b. **Bid Shopping:** In construction law, bid shopping is the practice of divulging a subcontractor's bid to another prospective contractor(s) before or after the award of a contract to secure a lower bid.
- c. **DBE:** Disadvantaged Business Enterprise A for-profit small business concern where socially and economically disadvantaged individuals own at least a 51% interest and control management and daily business operations.
- d. DBE Commitment: The DBE Commitment is identified in the Commitment to Subcontract to DBE (Form DT1506) and is expressed as the amount of DBE participation the prime contractor has secured. The DT1506, a contract document completed by the bidder, is required to be considered a responsive bidder on an FHWA-funded contract that has an assigned DBE goal. The prime contractor will have the option to submit the DT1506 digitally, as an entry with the bid in Bid Express, or as an attachment to the bid.
- e. **DBE Utilization:** The actual participation of a DBE subcontractor on a project. WisDOT verifies DBE utilization through review of the DBE Commitment, payments to subcontractors, and contract documentation. The Prime Contractor receives DBE credit for payments made to the DBE firms performing the work listed on the approved DBE Commitment, and those submitted after approved commitment with Attachment A.
- f. **Good Faith Effort:** Legal term describing a diligent and honest effort taken by a reasonable person under the same set of facts or circumstances. For DBE subcontracting, the bidder must show that it took all necessary and reasonable steps to achieve the assigned DBE goal by the scope, intensity, and appropriateness of effort that could reasonably be expected for a contractor to obtain sufficient DBE participation.
- g. **Manufacturer:** A firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract.
- h. **Reasonable Price:** Contractors are expected to assess reasonable price by analyzing the contract scope for DBE subcontract feasibility and comparing common line items in DBE and non-DBE subcontract quotes for the same work. Per federal regulation, reasonable price is not necessarily the lowest price.
- i. Supplier: A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles, or equipment required under the contract are bought, kept in stock, and regularly sold or leased to the public.
- j. **Tied quote:** Subcontractor quote that groups multiple bid/line items at a bundled/package price with a notation that the items within the quote will not be separated.

2. WisDOT DBE Program Compliance

a. Documentation Submittal

- The Commitment to Subcontract to DBE (Form DT1506 or digital submittal) must be submitted at the time of bid (Tuesday) by all prime contractors.
- Attachments A OR quotes from all DBEs included in the Commitment must be submitted at bid (Tuesday)
 OR
- Within one-hour following bid submittal by ALL prime contractors via eSubmit (Tuesday).
- If only DBE quotes were submitted, all remaining signed Attachments A must be submitted within 24-hours of bid closing via eSubmit (Wednesday).
- If the assigned DBE contract goal is not met, Documentation of Good Faith Effort (Form DT1202) and supporting documentation must be submitted within 24-hours of bid closing (Wednesday) via eSubmit.
 Instructions for eSubmit.

**Bidders have the option of submitting the DBE Commitment at the time of bid via direct entry through Bid Express OR with attachment of Form DT1506 (Commitment to Subcontract to DBE). The DBE Commitment entered with bid is the digital form of the DT1506. Separate submission of Form DT1506 is not required if the DBE Commitment is entered in Bid Express. Form DT1202, if applicable, is no longer required to be submitted at time of bid; submit DT1202 within the 24-hour supplemental time frame following bid closing.

The DBE Office will not certify Good Faith Effort and the Bureau of Project Development will consider the bid nonresponsive if the contractor fails to furnish the DBE Commitment (digitally entered into the bid OR Form DT1506 as an attachment), Attachments A, and Form DT1202 if applicable, as required. See sample forms in the Appendix.

b. Verification of DBE Commitment

The documentation related to DBE subcontract commitment submitted prior to contract award is evaluated as follows:

(1) DBE Goal Met

If the bidder indicates that the contract DBE goal is met, the Department will evaluate the DBE Commitment submitted with bid OR Form DT1506, and Attachments A to verify the actual DBE percentage calculation. If the DBE Commitment is verified, the contract is eligible for award with respect to the DBE Commitment.

(2) DBE Goal Not Met

- a) If the bidder indicates a bid percentage on the DBE Commitment that does not meet the assigned DBE contract goal, the bidder must request alternative evaluation of good faith effort through submission of Form DT1202 (Documentation of Good Faith Effort) within 24-hours of bid including narrative description. Supplementary documentation of good faith effort that supports the DT1202 submission is also due within 24-hours of bid submission and prior to bid posting. The Department will review the bidder's DBE Commitment and evaluate the bidder's good faith efforts submission.
- b) Following evaluation of the bidder's Good Faith Effort documentation the bidder will be notified that the Department intends to:
 - 1. Approve the request (adequate documentation of GFE has been submitted) no conditions placed on the contract with respect to the DBE Commitment;
 - 2. *Deny* the request (inadequate documentation of GFE has been submitted) the contract is viewed as non-responsive per Wisconsin Standard Specifications for Highway and Structure Construction and will not be executed.

c) If the Department denies the bidder's request, the contract is ineligible for award. The Department will provide a written explanation for denying the request to the bidder. The bidder may appeal the Department's denial (see Section 4).

Supplemental good faith effort documentation must be submitted through eSubmit.

3. Department's Criteria for Good Faith Effort Documentation

The Federal-aid Construction Contract Provision, referenced as FHWA-1273, explicitly states that the prime contractor shall be responsible for all work performed on the contract by piecework, station work, or subcontract.

The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of the contract including assurances of equal employment opportunity laws, DBE regulations, and affirmative action. Compliance encompasses responsible and responsive action, documentation, and good faith effort.

Contractually, all contractors, subcontractors, and service providers on the contract are bound by FHWA 1273 and DBE program provisions. **Prime contractors should encourage subcontractors to utilize DBE firms whenever possible to contribute to the assigned DBE contract goal.**

Bidders are required to document good faith effort. Per 49 CFR Part 26.53, good faith effort is demonstrated in one of two ways. The bidder:

- (1) Documents that it has obtained enough DBE participation to meet the goal; OR
- (2) Documents that it made adequate good faith efforts to meet the goal, even though it did not succeed

Appendix A of 49 CFR Part 26 provides guidance concerning good faith efforts. WisDOT evaluates good faith effort on a contract basis just as each contract award is evaluated individually.

The efforts employed by the bidder should be those that WisDOT can reasonably expect a bidder to take to actively and aggressively obtain DBE participation sufficient to meet the DBE contract goal. The Department will only approve demonstration of good faith effort if the bidder documents the quality, quantity, and intensity of the variety of activities undertaken that are commensurate with expected efforts to meet the stated goal.

The Department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort activity. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.

a. Solicitation Guidance for Prime Contractors:

- (1) Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use WisDOT-approved DBE outreach tools, including the UCP DBE Directory and the Bid Express Small Business Network to foster DBE participation on all applicable contracts.
- (2) As needed, request assistance with DBE outreach and follow-up by contacting the Department's DBE Support Services Office by phone or email request at least 14 days prior to the bid letting date. Phone numbers are (414) 438-4584 and/or (608) 267-3849; Fax: (414) 438-5392; E-mail: DBE_Alert@dot.wi.gov
- (3) Participate in and document a substantive conversation with at least one DBE firm per Let, to discuss questions, concerns, and any other contract related matters that may be applicable to the DBE firm. Guidelines for this conversation are provided in Appendix A of ASP-3.
- (4) Request quotes by identifying potential items to subcontract and solicit. In their initial contacts, contractors are strongly encouraged to include a single page, detailed list of items for which they are accepting quotes, by project, within a letting. See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix B. Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, as required by federal rules. In some cases, it might be appropriate to use DBE firms to do work in a prime contractor's area of specialization.

- i. Solicit quotes from certified DBE firms who match possible items to subcontract using all reasonable and available means. Additionally, forward copies of solicitations highlighting the work areas for which quotes are being sought to DBE Alert@dot.wi.gov
- ii. Acceptable outreach tools include SBN (Small Business Network, see Appendix C): https://www.bidx.com/wi/main, postal mail, email, fax, and phone.
 - a. Contractors must ask DBE firms for a response in their solicitations. See Sample Contractor Solicitation Letter, Appendix B. This letter may be included as an attachment to the sub-quote request.
 - b. Solicit quotes at least 10 calendar days prior to the letting date to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking if they need help organizing their quote, assistance confirming equipment needs, or other assistance supporting their submission of a competitive quote for their services.
 - c. A follow up solicitation should take place within 5 calendar days of the letting date. Email and/or SBN are the preferred method for the solicitation.
- iii. Upon request, provide interested DBE firms with adequate information about plans, specifications, and the requirements of the contract by letter, information session, email, phone call, and/or referral.
- iv. When potential exists, the contractor should advise interested DBE firms on how to obtain bonding, line of credit, or insurance if requested.
- v. Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:
 - a. Email to all prospective DBE firms in relevant work areas
 - b. Phone call log to DBE firms who express interest via written response or call
 - c. Fax/letter confirmation
 - d. Signed copy of record of subcontractor outreach effort

b. Guidance for Evaluating DBE quotes

- (1) Quote evaluation practices required to evaluate DBE quotes:
 - i. Reasonable Price: Contractors are expected to assess reasonable price by analyzing the contract scope for DBE subcontract feasibility and comparing common line items in DBE and non-DBE subcontract quotes for the same work. Per federal regulation, reasonable price is not necessarily the lowest price. See 49 CFR Part 26, Appendix A. IV.D(2).
- (2) Documentation submitted by the prime of the following evaluation is required to evaluate DBE quotes by contractors:
 - Evaluation of DBE firm's ability to perform "possible items to subcontract" using legitimate reasons, including but not limited to, *a discussion* between the prime and DBE firm regarding its capabilities prior to the bid letting. If lack of capacity is the reason for not utilizing the DBE firm's quote, the prime is required to contact the DBE by phone and email regarding their ability to perform the work indicated in the UCP directory listed as their work area by NAICS code. Only the work area indicated by the NAICS code(s) listed in the UCP directory can be counted toward DBE credit. Documentation of the conversation is required.
 - a In striving to meet an assigned DBE contract goal, contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.
 - b Additional evaluation Evaluation of DBE quotes with <u>tied bid items</u>. Typically, this type of quoting represents a cost saving but is not clearly stated as a discount. Tied quotes are usually presented as an 'all or none' quote. When non-DBE subcontractors submit tied bid items in their quotes, the DBE firm's quote may not appear competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples:

- i Compare bid items common to both quotes, noting the reasonableness in the price comparison.
- ii Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.

See Appendix D - Good Faith Effort Evaluation Measures and Appendix E - Good Faith Effort Best Practices.

- c. Requesting Good Faith Effort Evaluation At the time of bid- if the DBE goal is not met in full, the prime contractor must indicate they will file form DT1202- Documentation of Good Faith Effort within 24-hours of bid submission. Supplementary documentation of good faith effort that supports the DT1202 submission is also due within 24-hours of bid submission and prior to bid posting. Supporting documentation for the DT1202 is to include the following:
 - (1) Solicitation Documentation: The names, addresses, email addresses, and telephone numbers of DBE firms contacted along with the dates of both initial and follow-up contact; electronic copies of all written solicitations to DBE firms. A printed copy of SBN solicitation is acceptable.
 - (2) Selected Work Items Documentation: Identify economically feasible work units to be performed by DBEs to include activities such as: list of work items to be performed; breaking up of large work items into smaller tasks or quantities; flexible time frames for performance and delivery schedules.
 - (3) Documentation of Project Information provided to interested DBEs: A description of information provided to the DBE firms regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE firm.
 - (4) Documentation of Negotiation with Interested DBEs: Provide sufficient evidence to demonstrate that good faith negotiations took place. Merely sending out solicitations requesting bids from DBEs does not constitute sufficient good faith efforts.
 - (5) Documentation of Sound Reasoning for Rejecting DBEs and copies of each quote received from a DBE firm and, if rejected, copies of quotes from non-DBEs for same items.
 - (6) Documentation of Assistance to Interested DBEs- Bonding, Credit, Insurance, Equipment, Supplies/Materials
 - (7) Documentation of outreach to Minority, Women, and Community Organizations and other DBE Business Development Support: Contact organizations and agencies for assistance in contacting, recruiting, and providing support to DBE subcontractors, suppliers, manufacturers, and truckers at least 14 days before bid opening. Participate in or host activities such as networking events, mentor-protégé programs, small business development workshops, and others consistent with DBE support.

If the Good Faith Effort documentation is deemed adequate, the request will be approved and the DBE office will promptly notify the Prime Contractor and Bureau of Project Development.

If the DBE Office denies the request, the Prime Contractor will receive written correspondence outlining the reasons. The Department encourages the Prime Contractor to communicate with DBE staff to clarify any questions related to meeting goals and/or contractor demonstration of good faith efforts.

If the contract is awarded, the Prime Contractor must obtain written consent from the DBE Office to change or replace any DBE firm listed on the approved DBE Commitment. No contractor, prime or subsequent tier, shall be paid for completing work assigned to a DBE subcontractor on an approved DBE Commitment unless WisDOT has granted permission for the reduction, replacement, or termination of the assigned DBE in writing. If a prime contractor or a subcontractor on any tier uses its own forces to perform work assigned to a DBE on an approved DBE Commitment, they will not be paid for the work. Any changes to DBE Commitment after the approval of the DBE Commitment must be reviewed and approved by the DBE Office prior to the change (see Section 9).

Additional resources for demonstrating and tracking good faith effort can be found on the "Contracting with a DBE" webpage in the <u>ASP-3 and Good Faith Effort Guidance</u> section.

4. Bidder's Documentation of Good Faith Effort Evaluation Request Appeal Process

A bidder can appeal the Department's decision to deny the bidder's demonstration of Good Faith Effort through Administrative Reconsideration. The bidder must provide a written justification refuting the specific reasons for denial as stated in the Department's denial notice. The bidder may meet in person with the Department if so requested. Failure to appeal within 5 business days after receiving the Department's written notice denying the request constitutes a forfeiture of the bidder's right of appeal. Receipt of appeal is confirmed by email date stamp or certified mail signed by WisDOT staff. A contract will not be executed without documentation that the DBE provisions have been fulfilled.

The Department will appoint a representative who did not participate in the original good faith effort determination, to assess the bidder's appeal. The Department will issue a written decision within 5 business days after the bidder presents all written and oral information. In that written decision, the Department will explain the basis for finding that the bidder did or did not demonstrate an adequate good faith effort to meet the contract DBE goal. The Department's decision is final.

5. Determining DBE Eligibility

Directory of DBE firms

- a. The only resource for DBE firms certified in the State of Wisconsin is the Wisconsin Unified Certification Program (UCP) DBE Directory. WisDOT maintains a current list of certified DBE firms at: http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/dbe-ucp-directory.xlsx
- b. The DBE Program office is available to assist with contracting DBE firms:(608) 267-3849.
- c. DBE firms are certified based on various factors including the federal standards from the Small Business Administration that assigns a North American Industrial Classification (NAICS) Codes. DBE firms are only eligible for credit when performing work in their assigned NAICS code(s). If a DBE subcontractor performs work that is not with its assigned NAICS code, the prime contractor should contact the DBE Office to inquire about compatibility with the Business Development Program.

6. Counting DBE Participation

Assessing DBE Work

The Department will only count the DBE usage towards the contract DBE goal if the DBE firm is certified as a DBE by one of the UCP agencies. The Department only counts the value of the work a DBE actually performs towards the DBE goal. The Department assesses the DBE work as follows:

- a. The Department counts work performed by the DBE firm's own resources. The Department includes the cost of materials and supplies the DBE firm obtains for the work. The Department also includes the cost of equipment the DBE firm leases for the work. The Department will not include the cost of materials, supplies, or equipment the DBE firm purchases or leases from the prime contractor or its affiliate, with the exception of non-project specific leases the DBE has in place before the work is advertised.
- **b.** The Department counts fees and commissions the DBE subcontractor charges for providing bona fide professional, technical, consultant, or managerial services. The Department also counts fees and commissions the DBE charges for providing bonds or insurance. The Department will only count costs the program engineer deems reasonable based on experience or prevailing market rates.
- c. If a DBE firm subcontracts work, the Department counts the value of the work subcontracted to a DBE subcontractor.
- **d.** The contractor will maintain records and may be required to furnish periodic reports documenting its performance under this item.
- e. It is the Prime Contractor's responsibility to determine whether the work that is committed and/or contracted to a DBE firm can be counted for DBE credit by referencing the work type and NAICS code listed for the DBE firm on the Wisconsin UCP DBE Directory.

- f. It is the Prime Contractor's responsibility to assess the DBE firm's ability to perform the work for which it is committing/contracting the DBE to do. Note that the Department encourages the Prime Contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.
- **g.** The Prime Contractor will inform the DBE office via email of all DBE subcontractors added to the project following execution of the contract. The Prime Contractor may omit submission of another form DT1506, but must submit signed Attachment A forms for additional DBE firms.
- **h.** See Section 7 for DBE credit evaluation for Trucking and Section 8 for DBE credit evaluation for Manufacturers, Suppliers, and Brokers

Naming conventions: When emailing files, please use the following language to identify your submission- "Project #, Proposal #, Let date, Business Name, Attachment A" Email: DBE Alert@dot.wi.gov

*Note: A sublet request is required for DBE work, regardless of subcontract tier, and also for reporting materials or supplies furnished by a DBE.

- Sublet Requests via form DT1925 or WS1925 are required for 1st Tier DBEs
- For all 2nd Tier and below notification of DBE sublet is indicated by the contractor entering them in CRCS

7. Credit Evaluation for Trucking

All bidders are expected to adhere to the Department's current trucking policy posted on the HCCl website at: http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf

The prime contractor is responsible for ensuring that all subcontractors including trucking firms, receive Form FHWA 1273: https://www.fhwa.dot.gov/programadmin/contracts/1273/1273.pdf

See Section 8 for Broker credit.

8. Credit Evaluation for Manufacturers, Suppliers, Brokers

The Department will calculate the amount of DBE credit awarded to a prime using a DBE firm for the provisions of materials and supplies on a contract-by-contract basis. The Department will count the material and supplies that a DBE firm provides under the contract for DBE credit based on whether the DBE firm is a manufacturer, supplier, or broker. Generally, DBE credit is determined through evaluation of the DBE owner's role, responsibility, and contribution to the transaction. Maximum DBE credit is awarded when the DBE firm manufactures materials or supplies. DBE credit decreases when the DBE firm solely supplies materials, and minimal credit is allotted when the DBE firm's role is administrative or transactional. It is the bidder's responsibility to confirm that the DBE firm is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506 or DBE Commitment submitted with the bid.

a. Manufacturers

- (1) A manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
- (2) If the materials or supplies are obtained from a DBE manufacturer, **100**% percent of the cost of the materials or supplies counts toward DBE goals.

b. Regular Dealers of Material and/or Supplies

(1) A regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications

- and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
- (2) If the materials or supplies are purchased from a DBE regular dealer, count **60%** percent of the cost of the materials or supplies toward DBE goals.
- (3) At a minimum, a regular dealer must meet the following criteria to be counted for DBE credit:
 - i. The DBE firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
 - ii. The DBE firm must both own and operate distribution equipment for the product--bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt. If some of the distribution equipment is leased, the lease agreement must accompany the DBE Commitment form for evaluation of the dealer's control before the DBE office approves the DBE credit.
- (4) When DBE suppliers are contracted, additional documentation must accompany the DBE Commitment and Attachment A forms. An invoice or bill-of-sale that includes names of the bidder and the DBE supplier, along with documentation of the calculations used as the basis for the purchase agreement, subcontract, or invoice. WisDOT recognizes that the amount on the Attachment A form may be more or less than the amount on the invoice per b.(1) above.
 - i. The bidder should respond to the following questions and include with submission of form DT1506 or the DBE Commitment entered with bid:
 - a. What is the product or material?
 - b. Is this item in the prime's inventory or was the item purchased when contract was awarded?
 - c. Which contract line items were referenced to develop this quote?
 - d. What is the amount of material or product used on the project?
- (5) Supplies purchased in **bulk** from DBE firms at the beginning of the season may be credited to current contracts if submitted with appropriate documentation to the DBE office.
 - i. To ensure that the appropriate credit is assigned, follow the procedure below:
 - a. When DBE suppliers are contracted for bulk supply or commodity purchases, an invoice or bill-of-sale that includes names of the contractor and the DBE supplier should be submitted to the DBE Office via eSubmit (preferred during letting) or the DBE_Alert email box. The supply/commodity credit may be applied during the federal fiscal year (October- September) in which the purchase was made.
 - b. When the contractor intends to apply the credit to a particular project, submit a copy of the original invoice, documentation of the calculations for supplies/commodities to be used on the project, and an Attachment A. Indicate on the Attachment A:
 - This supply/commodity is in the prime's inventory or pre-paid in case of commodities
 - d. The full value of the original invoice submitted to the DBE Office, above in (1)
 - e. The amount of material or product used on this project
 - f. Fuel estimate listed on Attachment A will be recorded as a deduction from the full fuel purchase amount shown on the invoice
 - ii. DBE Office Process (Applies only to bulk purchases)
 - Supply/Commodity commitment is received
 - b. Engineer verifies amount listed on invoice and enters the full amount into spreadsheet
 - c. The amount of credit applied for each project is updated on the spreadsheet until the bulk purchase is exhausted
 - d. Engineer informs contractor when full amount of bulk purchase has been applied

c. Brokers, Transaction Expediters, Packagers, Manufacturers' Representatives

- (1) No portion of the cost of the materials, supplies, services themselves will count for DBE credit. However, WisDOT will evaluate the fees or commissions charged when a prime purchases materials, supplies, or services from a DBE certified firm which is neither a manufacturer nor a regular dealer, namely: brokers, packagers, manufacturers' representatives, or other persons who arrange or expedite transactions.
- (2) Brokerage fees are calculated as 10% of the purchase amount.
- (3) WisDOT may count the amount of fees or commissions charged for assistance in the procurement of the materials and supplies, fees, or transportation charges for the delivery of materials or supplies required on a job site.
- (4) Evaluation of DBE credit includes review of the contract need for the item/service, the sub-contract or invoice for the item/service, and a comparison of the fees customarily allowed for similar services to determine whether they are reasonable.

9. DBE Commitment Modification Policy (Formerly "DBE Replacement Policy")

a. Issuing a Contract Change Order

Any changes or modifications to the contract once executed are considered contract modifications and as such require a change order. In addition, the DBE office must provide consent for reduction, termination, or replacement of subcontractors approved on the DBE Commitment *in advance* of the modification for the prime contractor to receive payment for work or supplies. Additions to the DBE Commitment do not require advance notification of the DBE office. (see below e. DBE Utilization beyond the approved DBE Commitment)

b. Contractor Considerations

- (1) A prime contractor cannot modify the DBE Commitment through reduction in participation, termination, or replacement of a DBE subcontractor listed on the approved DBE Commitment without prior written consent from the DBE Office. This includes, but is not limited to, instances in which a prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.
- (2) If a prime contractor reduces participation, replaces, or terminates a DBE subcontractor who has been approved for DBE credit toward its contract, the prime is required to provide documentation supporting its inability to fulfill the contractual commitment made to the Department regarding the DBE utilization.
- (3) The Prime Contractor is required to demonstrate efforts to find another DBE subcontractor to perform at least the same amount of work under the contract as the DBE subcontractor that was terminated, to the extent needed to meet the assigned DBE contract goal. When additional opportunity is available by contract modifications, the Prime Contractor must utilize DBE subcontractors that were committed to equal work items, in the original contract.
- (4) In circumstances when a DBE subcontractor fails to complete its work on the contract for any reason, or is terminated from a contract, the Prime Contractor must undertake efforts to maintain its commitment to the assigned DBE goal.
- (5) The DBE subcontractor should communicate with the Prime Contractor regarding its schedule and capacity in the context of the contract. If the DBE firm anticipates that it cannot fulfill its subcontract, they will advise the Prime Contractor and suggest a DBE subcontractor that may replace their services and provide written consent to be released from its subcontract.
 - Before the Prime Contractor can request modification to the approved DBE Commitment, the Prime Contractor must:
 - a. Make every effort to fulfill the DBE Commitment by working with the listed DBE subcontractor to ensure that the firm is fully knowledgeable of the Prime Contractor's expectations for successful performance on the contract. Document these efforts in writing.

- b. If those efforts fail, provide written notice to the DBE subcontractor of the Prime Contractor's intent to request to modify the Commitment through reduction in participation, termination, and/or replacement of the subcontractor including the reason(s) for pursuing this action.
- c. Copy the DBE Office on all correspondence related to changing a DBE subcontractor who has been approved for DBE credit on a contract, including preparation and coordination efforts.
- d. Clearly state the amount of time the DBE firm has to remedy and/or respond to the notice of intent to replace/terminate. The DBE must be allowed five days from the date notice was received as indicated by email time stamp or signed certified mail, to respond, in writing. EXCEPTION: The Prime Contractor must provide a verifiable reason for a response period shorter than five days. For example, a WisDOT project engineer or project manager confirms that WisDOT has eliminated an item the DBE subcontractor was contracted for.
- e. The DBE subcontractor must acknowledge the contract modification with written response to the Prime Contractor and the DBE Office. If objecting to the subcontract modification, the DBE subcontractor must outline the basis for objection to the proposed modification, providing sound reasoning for WisDOT to reject the prime's request.

c. Request to Modify DBE Subcontracting Commitment

The written request referenced above may be delivered by email or fax. The request must contain the following:

- (1) Project ID number
- (2) WisDOT Contract Project Engineer's name and contact information
- (3) DBE subcontractor name and work type and/or NAICS code
- (4) Contract's progress schedule
- (5) Reason(s) for requesting that the DBE subcontractor be replaced or terminated
- (6) Attach/include all communication with the DBE subcontractor to deploy/address/resolve work completion

Naming conventions: When emailing files, please use the following language to identify your submission- "Project #, Proposal #, Let date, Business Name, MODIFICATION" Email: DBE Alert@dot.wi.gov + Project Engineer

WisDOT will review the request and any supporting documentation submitted to evaluate if the circumstance and the reasons constitute good cause for replacing or terminating the approved DBE subcontractor.

Good Causes to Replace a DBE subcontractor according to the federal DBE program guidelines {49 CFR part 26.53}

- · The listed DBE subcontractor fails or refuses to execute a written contract
- The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor
- The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements
- The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness
- The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215, and 1,200 or applicable state law
- The prime has determined that the listed DBE subcontractor is not a responsible contractor
- The listed DBE subcontractor voluntarily withdraws from the project and provides written notice of its withdrawal
- The listed DBE subcontractor is ineligible to receive DBE credit for the type of work required

 A DBE firm owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract.

d. Evaluation and Response to the Request

WisDOT's timely response to the Prime Contractor's request for modification of the approved DBE Commitment will be provided to the prime and the WisDOT project engineer via email.

If WisDOT determines that the Prime Contractor's basis for reduction in participation, replacement, or termination of the DBE subcontractor is not consistent with the good cause guidelines, the DBE office will provide a response via email within 48-hours of receipt of request from the Prime Contractor as indicated by email time stamp. The communication will include: the requirement to utilize the committed DBE, actions to support the completion of the contractual commitment, a list of available WisDOT support services, and administrative remedies, including withholding payment to the prime, that may be invoked for failure to comply with federal DBE guidelines for DBE replacement.

The WisDOT contact for all actions related to modification of the approved DBE Commitment is the DBE Program Engineer who can be reached at DBE_Alert@dot.wi.gov or (414) 335-0413.

e. DBE Utilization beyond the approved DBE Commitment

When the prime or a subcontractor increases the scope of work for an approved DBE subcontractor or adds a DBE subcontractor who was not on the approved form DT1506 or DBE Commitment submitted with bid at any time after contract execution, this is referred to as voluntary DBE contract goal achievement. The contractor must follow these steps to ensure that the participation is accurately credited toward the DBE goal:

- (1) Forward a complete, signed Attachment A form to the DBE Office. A complete Attachment A includes DBE subcontractor contact information, signatures, subcontract value, and description of the work areas to be performed by the DBE. The DBE Office will verify the DBE participation and revise the DBE Commitment based on the email/discussion and the new Attachment A.
- (2) When adding to an existing DBE Commitment, submit a new Attachment A to the DBE Alert mailbox
- (3) OR Submit a final Attachment A to DBE Alert during the Finals Process when Compliance receives notice of "Substantially Complete"

Naming conventions: When emailing files, please use the following language to identify your submission-"Project #, Proposal #, Let date, Business Name, New Attachment A" Email: DBE Alert@dot.wi.gov

Special note on trucking

- DBE truckers added to the sublets in CRCS will be approved without DBE credit (You will see a "N" in CRCS instead of "Y")
- Prime Contractors may enter a "place holder" e.g. \$1000.00, for DBE Trucking in CRCS if the full amount of trucking is unknown for sublet purposes only
- The hiring contractor may obtain the Attachment A with DBE signature included but the **Prime Contractor** must sign the Attachment A before submitting
- DBE truckers need to be added to the DBE commitment once. If the DBE trucker is on the initial commitment (DT1506/E1506) there is no requirement to submit another Attachment A for that trucker for that contract.

10. Commercially Useful Function

- **a.** Commercially Useful Function (CUF) is evaluated after the contract has been executed, while the DBE certified firm is performing contracted work items.
- **b.** The Department uses Form DT1011, DBE Commercially Useful Function Review and Certification to evaluate if the DBE is performing a commercially useful function. WisDOT counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.

- c. A DBE firm is performing a commercially useful function if the following conditions are met:
 - (1) For contract work, the DBE is responsible for executing a distinct portion of the work and is carrying out its responsibilities by actually performing, managing, and supervising that work.
 - (2) For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.
- d. Offsite Hauling when DBE truck will haul between a pit and plant or location other than the construction site associated with the commitment
 - (1) Indicate Offsite Hauling on Attachment A
 - (2) Discuss offsite hauling at weekly progress meetings with Project Engineer (PE)
 - (3) PE conducts spot checks of pits/plants to verify DBE truck is hauling and/or verifying hauling log
 - (4) Prime should be prepared to submit haul tickets, plant/pit tickets, timecards, and other pertinent documentation if requested by PE or DBE Office

11. Credit Evaluation for DBE Primes

WisDOT calculates DBE credit based on the amount and type of work performed by DBE certified firms for work submitted with required documentation. If the prime contractor is a DBE certified firm, the Department will only count the work that the DBE prime performs with its own forces for DBE neutral credit. The Department will also calculate DBE credit for work performed by any other DBE certified subcontractor, DBE certified supplier, and DBE certified manufacturer on the contract in each firm's approved NAICS code/work areas that are submitted with required documentation. Crediting for manufacturers and suppliers is calculated consistent with Section 8 of this document and 49 CFR Part 26.

12. Joint Venture

A joint venture is an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest. If a DBE performs as a participant in a joint venture, the Department will only credit the portion of the total dollar value of the contract equal to the portion of the work that the DBE performs with its own forces.

13. Mentor-Protégé

- **a.** If a DBE performs as a participant in a mentor-protégé agreement, the Department will credit the portion of the work performed by the DBE protégé firm.
- **b.** DBE credit is evaluated and confirmed by the DBE Office for any contracts on which the mentor-protégé team identifies itself to the DBE Office as a current participant of the Mentor-Protégé Program.
 - (1) DBE credit may only be awarded to a non-DBE mentor firm for using its own protégé firm for less than one half of its goal on any contract; and
 - (2) Not award DBE credit to a non-DBE mentor firm for using its own protégé firm for more than every other contract performed by the protégé firm.
- **c.** A DBE protégé firm may be eligible for conditional NAICS code extension for training with the mentor. Request permission from the DBE Office- Certification area.
- **d.** Refer to WisDOT's Mentor-Protégé guidelines for guidance on the number of contracts and amount of DBE credit allowed on WisDOT projects.

14. Use of Joint Checks

The use of joint checks is allowable if it is a commonly recognized business practice in the material industry. A joint check is defined as a two-party check between a DBE subcontractor, a prime contractor, and the regular dealer or materials supplier who is neither the prime nor an affiliate of the prime. Typically, the prime contractor issues one check as payor to the DBE subcontractor and to the supplier jointly (to guarantee payment to the supplier) as payment for the material/supplies used by the DBE firm in cases where the DBE subcontractor and materials have been approved for DBE credit. The DBE subcontractor gains the opportunity to establish a direct contracting relationship with the supplier to potentially facilitate a business rapport that results in a line of credit or increased partnering opportunities.

The cost of material and supplies purchased by the DBE firm is part of the value of work performed by the DBE to be counted toward the goal. To receive credit, the DBE firm must be responsible for negotiating price, determining quality and quantity, ordering the materials, and installing (where applicable) and "paying for the material itself." See 49 CFR 26.55(c)(1).

The approval to use joint checks constitutes a commitment to provide further information to WisDOT, upon request by staff. WisDOT will allow the use of joint checks when the following conditions are met:

- **a.** The Prime Contractor must request permission to use joint checks from the DBE Office by submitting the Application to Use Joint Checks.
 - (1) Request should be made when the DBE Commitment or the Request to Sublet is submitted; the request will not be considered if submitted after the DBE Subcontractor starts its work.
 - (2) Approval/Permission must be granted prior to the issuance of any joint checks.
 - (3) The payment schedule for the supplier must be presented to the DBE office before the first check is issued.
 - (4) The joint check for supplies must be strictly for the cost of approved supplies.
- b. The DBE subcontractor is responsible for furnishing and/or installing the material/work item and is not an 'extra participant' in the transaction. The DBE firm's role in the transaction cannot be limited solely to signing the check(s) to release payment to the material supplier. At a minimum, the DBE subcontractor's tasks should include the following:
 - (1) The DBE subcontractor (not the prime/payor) negotiates the quantities, price, and delivery of materials.
 - (2) The DBE subcontractor consents to sign/release the check to the supplier by signing the <u>Application to Use</u> <u>Joint Checks</u> after establishing the conditions and documentation of payment within the subcontract terms or in a separate written document.
- c. The Prime contractor/payor acts solely as a guarantor.
 - (1) The Prime Contractor agrees to furnish the check used for the payment of materials/supplies under the contract.
 - (2) The prime contractor/payor cannot require the subcontractor to use a specific supplier or the prime contractor's negotiated unit price.

15. Payment

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

Appendix A Substantive Conversation Guidelines

The substantive conversation is critical to all bidders' demonstration of good faith effort to meet the DBE goal prior to bid opening. Relationship building between primes and subcontractors is crucial to DBE goal attainment. Responsible bidders seek to build rapport with potential DBE subcontractors to understand capacity, areas of expertise, and assess contracting feasibility. Bidders who compete for WisDOT contracts are specialty contractors responding to a growing and changing contract environment. Just as these specialists are responsible for care of the roads, they are likewise responsible for contributing to the health of the industry. The substantive conversation drives collaboration that will build industry health and capacity. The following is intended to provide guidance for such discussions but is not an exhaustive list. Contractors are encouraged to incorporate their existing strategies for cultivating business relationships as well.

Prior to Bid Opening- this discussion should happen as early as possible (WisDOT advertisements are released weeks prior to each Let)

- 1. Determine DBE subcontractor's interest in quoting
- 2. If response indicates inexperience with quoting- offer support/assistance to the DBE in understanding the industry including fundamentals a subcontractor needs to know, required reading and/or resources.
- 3. Assess their interest and experience in the road construction industry by asking questions such as:
 - Have you competed for other WisDOT contracts? Ratio of competed/to wins
 - Have you performed on any transportation industry contracts (locally or with other states)?
 - What the largest contract you've completed?
 - Have you worked in the industry: apprentice, journeyman, safety, inspection etc.?
 - Does this project fit into your schedule? Are you working on any contracts now?
 - Have you reviewed a copy of the plans? Are you comfortable performing within the scope and quantity considerations of this contract?
 - What region do you work in? Home base?
 - Which line items are you considering?
 - Have you read/are you familiar with WisDOT Standard Specifications? Construction Material Manual?
 - Do you understand where your work fits in the project schedule, project phases?

Following Bid Opening- this discussion can happen at any time

- 1. After reviewing their quote, note the following in your discussion:
 - Does the quote look complete? Irregular?
 - Are there errors in the quote? Are items very high or very low?
 - In general, does the quote look competitive?
- 2. Questions and Advice for the bidder to share with the potential DBE subcontractor:
 - What line items would typically be in a competitive quote for a subcontractor of their specialty?
 - How many employees and what is their role/experience/expertise in your firm?
 - Do you have resources for labor (union member, family-based, community-resourced) and capital (banking relationship, bond agent, CPA)?
 - Where have you worked: cities, states, government, commercial, residential/private sector, etc. Explain similarities or differences.
 - Refer them to reliable, trusted, industry resources that can educate or connect them to relevant resources, education/certification resources, more appropriate contract opportunities.
 - Discussion about prime contract and subcontract liability, critical path items, contract quantities, schedule risks, and potential profit/loss (for upcoming known projects or in general).
 - Discussion of bonding, insurance, and overall business risk considerations.

Appendix B

Sample Contractor Solicitation Letter Page 1 (This sample is provided as a guide, not a formatting requirement)

DBE Solicitation - [Month] [Day], [Year] WisDOT Bid Letting

- Attention all DBEs. [Prime Contractor] is actively seeking your quote for the [Month][Day], [Year] Bid Letting. [Prime Contractor] is considering bidding on the projects listed on page 2 as a prime contractor. Please see page 2 for instructions and the sub-contractable opportunities for each proposal.
- **Does [Prime Contractor] accept quotes in areas we might self-perform?** Yes, we do! We support this federal rule and (if needed) we consider areas we might self-perform an opportunity to provide in the field assistance and training if we award your quote.
- Where can DBEs find the plans, specifications & addenda? Please visit [Prime Contractor's] plan room [LINK] or on WisDOT's Highway Construction Contract Information HCCI website: Wisconsin Department of Transportation Highway Construction Contract Information (wisconsindot.gov). This same website can be checked for the contract status.
- What should your quote include? All the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should also note items that you are DBE certified to perform, tied items, and any special terms. Please use page 2 as your cover sheet for your guote.
- **Do you have a question regarding bonding, credit, insurance, equipment, or supplies/materials?** We welcome all DBE questions! Please call [Prime Contractor] and ask to speak with [Contact]. [Prime Contractor] can provide basic information as well as a referral to a trusted industry partner for insurance and bonding needs.

When are quotes due?

- [Month] [Day], [Year] at [Time]. We accept quotes via SBN, email, or fax. Please make every effort to have your quotes in by this time or earlier. Quality check your quote so it includes the correct letting date, project ID, proposal number, unit price and extension.
- Who can DBEs contact for questions, information, clarification or for a quote evaluation? [Project Manager Name] [Phone] [Email]. If you are quoting [Prime Contractor] for the first time, we encourage you to come meet with us in person to discuss the project. Our office hours are 7:30 a.m. 5:00 p.m. On bid day, we are in the office by 6:30 a.m.

Why partner with [Prime Contractor]?

DBE partnership is a core part of [Prime Contractor's] mission. Including DBEs at the beginning of each project is essential in the success of each project. We consider DBEs to be important industry partners who bring dedication and knowledge at various stages during construction. We are proud to be an industry leader with our DBE partnership. Your success as a DBE is our success.

Please check all that apply:

Electrical

Signs/Posts/Markers

Survey/Staking

Yes, we will be quoting the projects & items listed below

Please take our name off your monthly DBE contact list

No, we are not interested in quoting on the letting or its items referenced below

Sample Contractor Solicitation Letter Page 2

(This sample is provided as a guide, not a formatting requirement)

REQUEST FOR QUOTE

[Prime Contractor] Letting Date: [Month] [Day], [Year] Project IDs: 1234-56-00 (Proposal #1) & 1234-01-78 (Proposal #6)

rime Contractor Contact:	DBE:	
hone:		
mail:		
Please circle the proposals ar	nd items you will be quoting below and	d contact us with any question
Proposal	1	6
County	Dane County	Crawford County
Clearing & Grubbing	Х	Х
Dump Truck Hauling	X	Х
Curb/Gutter/Sidewalk	X	
Erosion Control Items		Х
Excavation	X	Х
Pavement Marking		Х
Traffic Control	X	
Sawing	X	Х
QMP, Base		Х
Pipe Underdrain	X	
Landscape		Х
Beam Guard	X	

X

Again, please make every effort to have your quotes into our office by time deadline prior to the letting date.

X

X

Sample Contractor Solicitation Email - Simplified

(This sample is provided as a guide, not a formatting requirement)

ATTENTION DBEs

- [Prime Contractor] specializes in municipal projects in the XX Region(s)
- We have successfully competed for and completed XX WisDOT projects over the past XX years
- Consider [Prime Contractor] your partner on WisDOT Projects

[Prime Contractor] is seeking <u>your</u> subcontractor quote for the XX/XX/20XX WisDOT bid letting on the below projects:

Project	Proposal	County	Region
1234-56-00	2	Dane	SW
1234-01-78	6	Crawford	SW

- Please review the attachments [attach Solicitation Letter] and respond with your intent to quote (or not) along with the work items you are interested in performing and respond via fax or email by <u>date</u>. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Please include labor, equipment, material, and related bonding or insurance.
- If you have any questions regarding bonding, credit, insurance, equipment and/or materials/supplies, please feel free to call [Prime Contractor] and ask for [Contact]. (Include if your company is willing to answer these types of DBE questions)
- o Plans and Specifications can be found: WisDOT HCCI Website: List webpage where plans are located
- If you do choose to quote, please make every effort to have your quote into our office by <u>time and date.</u>
 Make sure the correct letting date, project number, unit price and extension are included in your quote.
- Should you have questions regarding the mentioned project, please call our office at (414) 555-5555 and we will direct you to the correct estimator/project manager.
 Our office hours are 7:30 a.m. 5:00 p.m.

Thank you – we look forward to working with your company on this project!

Prime Contractor
Project Manager
Direct: 414-555-555

Oirect: 414-555-555 Cell: 414-555-556

Sample Contractor Solicitation Email to non-DBE WisDOT Subcontractors - Simplified

(This sample is provided as a guide, not a formatting requirement)

ATTENTION WISDOT SUBCONTRACTORS

[Prime Contractor] is considering bidding on the below projects for the XX/XX/20XX WisDOT Bid Letting:

Project	Proposal	County	Region	DBE Goal
1234-56-00	2	Dodge	sw	6.00%
1234-01-78	11	Adams	NC	3.00%
1234-00-99	20	Buffalo	NW	5.00%
1234-00-98	33	Portage	NC	6.00%

The above projects have DBE goals and [Prime Contractor] is committed to DBE inclusion with every project. As such, we are requesting:

- All WisDOT Subcontractors to <u>solicit and utilize</u> DBEs in your quotes.
- DBE participation can be achieved through purchasing materials from DBE suppliers, using DBE subcontractors and/or DBE trucking firms or any combination of these.
- If there is an opportunity to untie an item in your quote so a DBE can be utilized, please look for those opportunities as well.
- Your quote will be evaluated based on the amount of DBE participation your company is able to provide when compared to other quotes for the same work.

If you do choose to quote, please make every effort to have your quote into our office by <u>time and date.</u> Please submit all quotes to [Email]. Make sure the correct letting date, project number, unit price and extension are included in your quote.

Should you have questions regarding the mentioned project, the Project Manager contact is: [Name] [Phone Number] [Email]

Thank you for utilizing DBEs who are trusted industry partners with WisDOT projects.

Prime Contractor Project Manager Direct: 414-555-5555 Cell: 414-555-5566

Appendix C Small Business Network (SBN) Overview

The Small Business Network is a part of the Bid Express® service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription. Within the Small Business Network, **Prime Contractors** can:

- 1. Easily select proposals, work types and items:
 - a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for later completion.
- 2. Create sub-quotes for the subcontracting community:
 - a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
 - b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
 - c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE preferred request.
 - d. Add attachments to sub-quotes.
- 3. View sub-quote requests & responses:
 - a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
 - b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing.
- 4. View Record of Subcontractor Outreach Effort:
 - a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a "Good Faith" effort in reaching out to the DBE community.
 - b. Easily locate pre-qualified and certified small and disadvantaged businesses.
 - c. Advertise to small and disadvantaged businesses more efficiently and cost effectively.
 - d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency).

The Small Business Network help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs. The DBE will provide free SBN accounts to DBEs when requested. Use DBE_Alert@dot.wi.gov to request an account. **DBE firms can:**

- 1. View and reply to sub-quote requests from primes:
 - a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests or hidden with one click if they are not applicable.
- 2. Select items when responding to sub-quote requests from primes:
 - a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
 - b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes. c. Add attachments to a sub-quote.
- 3. Create and send unsolicited sub-quotes to specific contractors:
 - a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
- 4. Easily select and price items for unsolicited sub-quotes:
 - a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on a per-item basis as well.
 - b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder.
 - c. Add attachments to a sub-quote.
 - d. Add unsolicited work items to sub-quotes that you are responding to.
- 5. Easy Access to Valuable Information
 - a. Receive a confirmation that your sub-quote was opened by a prime.
 - b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
 - c. View important notices and publications from DOT targeted to small and disadvantaged businesses.
- 6. Accessing Small Business Network for WisDOT contracting opportunities
 - a. If you are a contractor not yet subscribing to the Bid Express service, go to **www.bidx.com** and select "Order Bid Express." The Small Business Network is a part of the Bid Express Basic Service.

Appendix D

Good Faith Effort Evaluation Measures by categories referenced in DBE regulations

Bidders must demonstrate that they took all necessary and reasonable steps to achieve the assigned DBE contract goal. For each contract, all bidders must submit documentation indicating the goal has been met <u>or</u> if falling short of meeting the assigned goal, must request a DBE Goal Waiver and document all efforts employed to secure DBE subcontractor participation on Form DT1202.

DBE staff analyze the bidder's documented good faith efforts to determine if action taken was sufficient to meet the goal. Sufficiency is measured contract-by-contract. WisDOT evaluates active and aggressive efforts, quality, quantity, scope, intensity, and appropriateness of the bidder's efforts as a scale of the principles of Good Faith outlined in 49 CFR Part 26, Appendix A. Additional emphasis is placed on the bidder's demonstration of timely submission of documentation and communication with DBE subcontractors, and business development initiatives undertaken to support DBE firm growth.

The following is a sample of good faith effort activities that are rated according to the accompanying rubric. Contractors are encouraged to identify additional activities that align with their business type(s).

- Personal, tailored solicitation to firms that specialize in work types planned or desired for subcontracting
- Follow up to initial solicitation via email or phone
- Substantive conversation including topics such as contract liability, critical path work items, schedule risks, and potential profit/loss
- SBN utilization including posting quotes
- Review and response to DBE quotes including provision of information about plans, specifications, and requirements as applicable
- Documentation requesting subcontractors support DBE goal by solicitation and inclusion of DBE subcontractor quotes
- Responsive and timely submission of organized documentation
- Analysis of number of DBE firms who do work types that you typically subcontract
- Analysis of number of DBE firms who reside in geographical areas where prime seeks work
- Analysis of firms who express interest in bidding/quoting including the number of firms who declined your solicitation
- Reference check of DBE subcontractor work or training (documentation of questions and response required)
- Number of different efforts undertaken to meet the assigned DBE goal as documented in accompanying Form DT1202
- Submission of all DBE quotes received matched with a variety of work to be performed by DBEs
- Number and names of DBE firms provided written advice, or referral to industry-specific business development resources
- Overall pattern of DBE utilization on all WisDOT contracts which may include contracting with municipalities
- Documentation of resources expended to meet assigned DBE goal (#of hours, staff titles, average pay rate, actions taken)
- Analysis of subcontractable work items to be completed by prime beyond prime contractor's 30%
- Risk analysis of work items that are typically in tied quotes that could be unbundled
- List of contract work items in smallest economically feasible units, identifying schedule impact
- Submission of a Gap Analysis identifying DBE skillset and/or industry needs
- Staff training in EEO and Civil Rights laws as documented in training logs
- Written Capacity Assessment completed with DBE firm documenting its ability to perform the work quoted
- DBE engagement efforts beyond simple solicitation that include a substantive discussion, initiated as early in the acquisition process as possible (points added for each day prior to letting)
- Outreach and marketing efforts with minority, women, and veteran-focused organizations at least 10 days prior to bid opening
- Active involvement in WisDOT's Business Development Program, TrANS training, facilitated networking efforts, workshops
- Customized teaching/training efforts for future opportunities with DBE subcontractor, contract specific and/or annually
- Introduction and reference provided for DBE subcontractor to a prime who has not previously contracted with the DBE firm
- Prime utilization of a DBE subcontractor the prime has not contracted with previously
- Written referral/recommendation to bond/insurance agents, manufacturer, supplier
- Documented efforts fostering DBE participation through administrative and/or technical assistance
- Evidence of negotiation with the DBE firm about current and future Let opportunities
- Recommendation of local and state services that support small business and access to opportunity: DOA, SBA, WEDC, WPI, etc.
- Advice on bonding, lines of credit, or insurance as required to complete the items quoted and contract requirements.
 Page 22 of 36

GFE Evaluation Rubric – Phase 1 – Initial Review

DT1202	Examples	Rating	OBOEC Feedback
Solicitation Documentation	Identify all reasonable and available activities performed to solicit the interest of all certified DBEs who have capacity and ability to perform work on the project. Such as: Updated solicitation letter and email, timely		
	solicitation, and follow-up, and/or utilized various methods to communicate solicitation (ex: letter, email, publication, posting and/or website)		
Selected Work Items Documentation	All work items are broken out into economically feasible units to facilitate DBE participation.		
	Such as: Selected work items are specific to each proposal and clearly identified in all solicitation(s)		
Documentation of Project Information provided to Interested DBEs	Provide interested DBEs with adequate information about the plans, specifications, and any other contractual requirements in a timely manner to assist DBEs in response to solicitation.		
	Such as: Project information is clearly identified in all solicitation(s)		
Documentation of Negotiation with Interested DBEs	Provide sufficient evidence demonstrating that good faith negotiations took place during the bid letting.		
	Such as: Documented attempts with DBEs or on behalf of DBEs to increase DBE participation		
Documentation of Sound Reason for Rejecting DBEs	Provide sufficient evidence demonstrating that DBEs are rejected for sound reasons.		
	Such as: Detailed and thoughtful analysis that considers both the percentage and dollar difference when rejecting a DBE including past performance, relevant business experience and stability, safety record, business ethic and integrity, technical capacity, and other tangible factors.		
Documentation of Assistance to Interested DBEs- bonding, credit, insurance, equipment, supplies/materials	Documented assistance in both solicitation(s) and outreach to DBEs.		
Documentation of Outreach to Minority, Women, and Community organizations and other DBE Business Development Support	Effectively use the services of minority, women, and community organizations as well as contractors' groups, local, state, and federal business assistance offices and organization that provide assistance in recruiting and supporting DBEs, as well participation in activities that support DBE business development.		
	Such as: Variety of activities that translate into meaningful DBE participation		
Documentation of other GFE activities	Such as: Used DT1202 Excel Workbook, Diversity & Inclusion company policy, Mentor-Protégé participant, awarded neutral DBE after bid submission, included company GFE overview/strategy information and/or company website highlights DBE opportunities and participation		
Overall Demonstration of GFE			

GFE EVALUATION RATING LEGEND – PHASE 1 – Initial Review

Documentation provided by bidder is evaluated and rated on the rubric. Bidders should include activities characterized by the following types of effort:

ACTIVE & AGGRESSIVE: Demonstrated through engaged and assertive activity

QUALITY: Demonstrated through essential character of conscientious and serious activity

QUANTITY: Demonstrated through a measurable number of activities

SCOPE & INTENSITY: Demonstrated through a rigorous approach to an appropriate and purposeful range of activities

TIMING: Demonstrated through engagement efforts beyond simple solicitation, initiated early in the process

GFE EVALUATION - PHASE 2 - Team Review

GFE Team completes:

- Review of activities included on the rubric
- Review of the intent to award and sound reasoning submitted by Prime
- Bid analysis to confirm if any bid submitted met the DBE goal
- Review average of other bidders DBE goal achievement
- Team review of combined efforts documented in Phase 1 and 2 constitute final GFE determination

Rating Scale:

GFE Approval:

Bona Fide = 6 or more categories color coded green.

Genuine effort characterized by sincere and earnest activities - "Solicitation" and "Sound Reasoning" must be green

GFE Approval:

Sufficient = 5 or more categories color coded green or yellow

Adequate effort documented with a variety of quality activities – "Solicitation" and "Sound Reasoning" must be green or yellow

GFE Denial:

Pro Forma efforts = 4 or less categories color coded green or yellow. Perfunctory effort characterized by routine or superficial activities

Green = Exceeds expectations

Yellow = Meets expectations

Red = Areas in need of attention and/or absence of documentation

See OBOEC Rubric Analysis Feedback

Excerpt from Appendix A to 49 CFR Part 26:

V. In determining whether a bidder has made good faith efforts, it is essential to scrutinize its documented efforts. At a minimum, you must review the performance of other bidders in meeting the contract goal. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts. As provided in §26.53(b)(2)((vi), you must also require the contractor to submit copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract to review whether DBE prices were substantially higher; and contact the DBEs listed

GFE RUBRIC ANALYSIS				
OBOEC DECISION	APPROVAL OR DENIAL			
Prime Contractor				
Proposal				
Project				
Bid Letting				
DBE Goal Amount				
DBE Goal Amount Achieved				
Bid Analysis				
Goal %	Achieved %			
Apparent Low Bidder	%			
Bidder B				
Bidder C				
Average of OTHER Bidders (Not including Apparent Low Bidder)				
DBE Quotes Received				
DBE Quotes Awarded				
DBE Quote(s) Rejected	Rejected Quote Analysis			
DBE Quote(s) Awarded	Awarded DBE Amount			

Appendix E Good Faith Effort Best Practices

This list is not a set of requirements; it is a list of potential strategies

Primes

- Prime contractor open houses inviting DBE firms to see the bid "war room" or providing technical assistance.
- Participate in speed networking and mosaic exercises as arranged by DBE office.
- Host information sessions not directly associated with a bid letting.
- Participate in a formal mentor protégé or joint venture with a DBE firm.
- Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings.
- Facilitate a small group DBE 'training session' clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications, and communication methods.
- > Encourage subcontractors to solicit and highlight DBE participation in their quotes to you.
- Quality of communication, not quantity creates the best results. Contractors should be thorough in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

DBE

- > DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Review the status of contracts on the HCCl website reviewing the 'apparent low bidder' list and bid tabs at a minimum.
- Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation related projects of similar size and scope, firm expertise and staffing.
- Participate in DBE office assessment programs.
- Participate on advisory and mega-project committees.
- Sign up to receive the DBE Contracting Update.
- Consider membership in relevant industry or contractor organizations.
- Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the Department are the only ways to get work.

Appendix F Good Faith Effort Evaluation Guidance Appendix A of 49 CFR Part 26

I. When, as a recipient, you establish a contract goal on a DOT-assisted contract for procuring construction, equipment, services, or any other purpose, a bidder must, in order to be responsible and/or responsive, make sufficient good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.

II. In any situation in which you have established a contract goal, Part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, you have the responsibility to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made, based on the regulations and the guidance in this Appendix.

The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call. Determinations should not be made using quantitative formulas.

- III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.
- IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.
- A. (1) Conducing market research to identify small business contractors and suppliers and soliciting through all reasonable and available means the interest of all certified DBEs that have the capability to perform the work of the contract. This may include attendance at pre-bid and business matchmaking meetings and events, advertising and/or written notices, posting of Notices of Sources Sought and/or Requests for Proposals, written notices or emails to all DBEs listed in the State's directory of transportation firms that specialize in the areas of work desired (as noted in the DBE directory) and which are located in the area or surrounding areas of the project.
- (2) The bidder should solicit this interest as early in the acquisition process as practicable to allow the DBEs to respond to the solicitation and submit a timely offer for the subcontract. The bidder should determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.

- B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units (for example, smaller tasks or quantities) to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces. This may include, where possible, establishing flexible timeframes for performance and delivery schedules in a manner that encourages and facilitates DBE participation.
- C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation with their offer for the subcontract.
- D. (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional Agreements could not be reached for DBEs to perform the work.
- (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
- E. (1) Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union status) are not legitimate causes for the rejection or non-solicitation of bids in the contractor's efforts to meet the project goal. Another practice considered an insufficient good faith effort is the rejection of the DBE because its quotation for the work was not the lowest received. However, nothing in this paragraph shall be construed to require the bidder or prime contractor to accept unreasonable quotes in order to satisfy contract goals.
- (2) A prime contractor's inability to find a replacement DBE at the original price is not alone sufficient to support a finding that good faith efforts have been made to replace the original DBE. The fact that the contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the contractor of the obligation to make good faith efforts to find a replacement DBE, and it is not a sound basis for rejecting a prospective replacement DBE's reasonable quote.
- F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
- G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, State, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

V. In determining whether a bidder has made good faith efforts, it is essential to scrutinize its documented efforts. At a minimum, you must review the performance of other bidders in meeting the contract goal. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts. As provided in §26.53(b)(2)((vi), you must also require the contractor to submit copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract to review whether DBE prices were substantially higher; and contact the DBEs listed on a contractor's solicitation to inquire as to whether they were contacted by the prime. Pro forma mailings to DBEs requesting bids are not alone sufficient to satisfy good faith efforts under the rule.

VI. A promise to use DBEs after contract award is not considered to be responsive to the contract solicitation or to constitute good faith efforts.

[79 FR 59600, Oct. 2, 2014]

Appendix G

(SAMPLE) Forms DT1506 and DT1202

Official Form DT1506 can be found here: https://wisconsindot.gov/Documents/formdocs/dt1506.pdf

	IT TO SUBCONTRACT TO DBE s.84.06(2) Wis. Stats. Non-Tradition		Project ID: Proposal #	Wisconsin D	•		ortation
Prime Contractor:			-				
	s that a specified percentage of the work be subcontr		Letting Date: Total \$ Value of	<u> </u>			
	ess enterprise and that this information be submitted The submittal of this form with the bid proposal const		Prime Contract: \$ DBE Contract Goal: %				
DBE commitment. In	clude Attachment A for DBEs included on commitme	nt.	DBE Goal Achiev		.00%		
his form must be	completed and returned for this proposal.						
1. DBE Firm	2. Work or Items to be subcontracted	3. Supplier Y/N	4. Trucking Only	5. DBE Ful Subcontrac		6. DBE An	
			O# L#				
			O# L#				
			0#				
			L# O#				
			L#				
			O# L#				
			O# L#				
			0#				
			L# O#				
			L# O#				
			L#				
			O# L#				
			O# L#				
			0#				
			L# O#				
			L#				
			O# L#				
			O# L#				
			0#				
			L# O#				
			L# O#				
			L#				
			O# L#				
			O# L#				
			0#				
			L# O#				
			L#				
				\$	0.00	\$	0.00
	vernment Use Only pproved Amounts						
A = \$	%	¥					
V = \$	%	Ĵ	Prime Representa	tive Signat	ture & D	ate	
Total = \$	%						
Signature: Date:		- 72		<u> </u>	24		
Good faith effort a	pproved: Yes 🗌 No 🗌	ļ	DBE Office Signat	ure & Date	: Appro	ved	

1

COMMITMENT TO SUBCONTRACT TO DBE ATTACHMENT A

CONFIRMATION OF PARTICIPATION

Project I.D.:		Prop	osal Number:		
Letting Date:					
Name of DBE Firm Participat	ing in this Contract:				
Name of DBE Firm Participat	ing in this Contract.				
Name of the Prime/Subcontra	actor who hired the DBE	Firm:	(list all names of tiers if more th	an one)	
Type of Work or Type of Mate	erial Supplied:				
Total Subcontract Value:			Total DBE Credit Value:		
		1000		2000	
		Prime	e Contractor Representative's Sign	ature	
FOR PRIME CONTRACTORS C	ts with the participating	Prime	e Contractor Representative's Nam	ne (Print Nam	ne)
DBE firm to perform the type of v material indicated above for the above.		Prime Contractor (Print Company Name)			
		Date			
FOR PARTICIPATING DBE FIR	ts with the Prime	Parti	cipating DBE Firm Representative'	s Signature	Date
Contractor or the Hiring Contract work or supply the material indic subcontract value listed above.		Parti	cipating DBE Firm Representative'	s Name (Prir	nt Name)
FOR DBE TRUCKING FIRMS C I certify that I will utilize, for DBE	credit, only trucks listed	Parti	cipating DBE Firm (Print Company	Name)	
on my WisDOT approved Schedule of Owned/Leased Vehicles for DBE Credit form and I will be utilizing the number of trucks as listed below.		DBE	Firm's Address:		
# Owned Trucks	# Leased Trucks		# DBE-Owned Leased Trucks		-DBE-Owned sed Trucks
Off site Hauling	ı				



DOCUMENTATION:OF:GOOD:FAITH:EFFORT:

Wisconsin-Department-of-Transportation DT1202......3/2020

+

Project ID	Proposal-No.	Letting
Prime Contractor		County
Person Submitting Document		Telephone-Number
Address		Email-Address

All-bidders-must-undertake-necessary-and-reasonable-steps-to-achieve-the-assigned-DBE-contract-goal-per-federal-regulatory-guidance-at-49-CFR-Part-26.-Bidders-use-this-form-to-document-all-efforts-employed-to-meet-the-assigned-goal-as-a-record-of-contractor-good-faith-efforts-(GFE).-Refer-to-ASP3-or-49-CFR-Part-26-for-guidance-on-actions-that-demonstrate-good-faith-effort.

It is critical to list-all-efforts, attach-documentation, and follow the instructions to complete this submission.

Documentation of good faith effort includes copies of each DBE and non-DBE subcontractor quote submitted to the bidder for the same line items. Utilize the sample documentation logs to document and organize efforts.

Submit-good-faith-effort-documentation-per-ASP-3-guidelines.

Instructions: Provide-a-narrative-description-of-all-activities pursued to demonstrate-good-faith-efforts, any-corresponding-documentation, and applicable-explanation-on-separate-pages. Include the following-items, organized-in-the-order-listed-below.

1.→ Solicitation Documentation:

- a. Purpose: To identify all-reasonable and available activities the bidder-performed to solicit the interest of all-certified DBEs who have the capacity and ability to perform work on the project. All-solicitation efforts should begin as early as possible to ensure DBEs have ample time to respond and ask-questions.
- b. Action: Identify and list-all-activities engaged in to solicit DBEs using all reasonable and available means such as written notice and follow-up communications; substantive conversations; pre-bid-meetings; networking events; market-research; advertising.

2.→ Selected·Work·Items·Documentation:

- a.→ Purpose: To ensure that all work items are broken out into economically feasible units to facilitate DBE participation. This must occur-even when you prefer to perform the work yourself.
- b. Action: Identify economically feasible work units to be performed by DBEs to include activities such as: list of work items to be performed; breaking up of large work items into smaller tasks or quantities; flexible time frames for performance and delivery schedules.

3.→ Documentation of Project Information provided to Interested DBEs:

- a.→ Purpose: To provide interested DBEs with adequate information about the plans, specifications, and any other contractual requirements in a timely manner to assist DBEs in response to solicitation.
- b.→ Action: Provide DBEs · access · to · plans, · specifications, · and · other · contract · requirements . · Early · solicitation · allows · ample · opportunity · to · provide · project · information, · links · to · Let · advertisements, · and · substantive · engagement · with · DBEs.

4.→ Documentation of Negotiation with Interested DBEs:

- a.→ Purpose: To ensure that negotiations with interested DBEs were made in good faith providing evidence as to why agreements could not be reached for DBEs to perform work.
- b. Action: Provide-sufficient evidence to demonstrate that good-faith negotiations took-place. Merely-sending-out-solicitations requesting-bids from DBEs does not constitute sufficient good-faith efforts. A bidder using good-business judgment considers a number of factors in negotiating with all subcontractors, and the firm's price and capabilities in addition to contract goals are taken into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for failing to meet the DBE goal as long as costs are reasonable. (see 49 CFR Part 26 Appendix A)

5.→ Documentation·of·Sound·Reason·for·Rejecting·DBEs:

- a.→ Purpose: To ensure that bidders avoid rejecting DBEs as unqualified without sound reasons. Reasons for rejection must be based on thorough investigation of DBE capabilities.
- b. Action: Provide-sufficient-evidence to demonstrate that DBE-was rejected for sound reasons such as past-performance, relevant business experience and stability, safety record, business ethic and integrity, technical capacity, other tangible factors.

6.→ Documentation·of·Assistance·to·Interested·DBEs-·Bonding,·Credit,·Insurance,·Equipment,· Supplies/Materials:·

- a.→ Purpose: To assist interested DBEs in obtaining bonds, lines of credit, insurance, equipment, supplies, materials, and other assistance or services.
- b. Action: Assist-interested DBEs in obtaining bonding, lines of credit or insurance, and provide technical assistance or information related to plans, specifications, and project requirements. Assist DBEs in obtaining equipment, supplies, materials or other services related to meeting project requirements (excluding supplies or equipment the DBE purchases from the prime).

7.→ Documentation of outreach to Minority, Women, and Community Organizations and other DBE Business Development Support:

- a.→ Purpose: To effectively use the services of minority, women, and community organizations as well as contractors groups, local, state, and federal business assistance offices and organization that provide assistance in recruiting and supporting DBEs, as well as participation in activities that support DBE business development.
- b.→Action: Contact-organizations and agencies for assistance in contacting, recruiting, and providing support to DBE subcontractors, suppliers, manufacturers, and truckers at least 14 days before bid opening. Participate in or host activities such as networking events, mentor-protégé programs, small business development workshops, and others consistent with DBE support.

Return to: Wisconsin-Department of Transportation DBE-Program-Office PO-Box-7965 Madison, WI-53707-7965 DBE_Alert@dot.wi.gov

I-certify-that-I-have-utilized-comprehensive-good-faith-efforts-to-solicit-and-utilize-DBE-firms-to-meet-the-DBE-participation-requirements-or this-contract-proposal,-as-demonstrated-by-my-responses-and-as-specified-in-Additional-Special-Provision-3-(ASP-3).						
certify that the information given in the Documentation of Good Faith	${\sf Efforts} \hbox{-} {\sf is} \hbox{-} {\sf true} \hbox{-} {\sf and} \hbox{-} {\sf correct} \hbox{-} {\sf to} \hbox{-} {\sf the} \hbox{-} {\sf best} \hbox{-} {\sf of} \hbox{-} {\sf my} \hbox{-} {\sf knowledge} \hbox{-} {\sf and} \hbox{-} {\sf belief}. \cdots$					
further understand that any willful falsification, fraudulent statement, involve debarment and/or prosecution under applicable state (Trans 50						
	(Bidder/Authorized Representative Signature)					
	00000					
]	(Print-Name)					
	99 99 9					
	(Title)					

Good·Faith·Effort·-·Sample·Documentation·Logs

The sample logs below are provided as guides rather than exhaustive list. See ASP3, Appendix A for additional examples of demonstrable good faith efforts. Attach documentation for each activity listed.

Acceptable-forms-of-documentation-include-copies-of-solicitations-sent-to-DBEs, notes-from-substantive-conversations-and-negotiations-with-DBEs, copies-of-advertisements-placed, email-communications, all-quotes-received-from-DBEs-and-from-all-subcontractors-who-were-considered-alongside-DBE-quotes, proof-of-attendance-at-applicable-networking-events; flyers-for-events-or-workshops-for-DBEs-offered-by-the-prime, and-other-physical-records-of-good-faith-efforts-activities.

SOLICITATION-LOG-

Date	Activity	Name-of-DBE-Solicited	Follow-up
4/1/2020	Sent-May-Let-solicitation	Winterland · Electric	Spoke-with-Mark-Winterland-on-4/15/20-to-ask-if-
			he-would-quote-

SELECTED WORK-ITEMS-SOLICITED LOG

Work-Type	DBE-Firm	Contact-Person	Date	Contact·Mode
Pavement-Marking	ABC-Marking	Leslie·Lynch	4/1/2020	Email; phone
ravement/warking	#1-Marking-Co.	Mark-Smart	4/1/2020	Email;·left·VM
Flactrical	Winterland·Electric	Tabitha-Tinker	4/3/2020	Email,·left·VM
Electrical	Superstar-Wiring	Jose-Huascar	4/3/2020	Email; phone

INFORMATION-PROVIDED-LOG

Request- Date	DBE-Firm	Information·Requested·&·Provided	Response- Date
4/1/2020		Requested-info-on-electrical-requirements;-provided- plan-and-link-to-specs	4/3/2020
4/21/2020	Absolute-Construction	Wanted to know how and when supplies are paid for by WisDOT; referred to spec that covers stockpiling	4/21/2020

NEGOTIATIONS:LOG

Date	DBE-Firm	Contact-Name	Work-Type	Quotes- Rec'd?	Considere d-for- project?	If-not-selected, why?
4/12/2020	ABC-Landscape	John-Dean	Erosion-Control	Yes	No	Cannot-perform-all-items
4/17/2020	Wild-Ferns	Sandy-Lynn	Erosion-Control	Yes	Yes	
4/20/2020	#1·Marking	Mark-Smart	Electrical	Yes	Yes	

ASSISTANCE-LOG

Date	DBE-Firm	Contact-Person	Assistance-Provided
4/1/2020	ABC-Sawing	Jackie-Swiggle	Informed·DBE·on·how·to·obtain·bonding
4/17/2020	Supreme-Construction	Winston-Walters	Provided-contact-for-wholesale-supply- purchase

OUTREACH & BUSINESS DEVELOPMENT LOG

Date	Agency/Organization· Contacted	Contact-Person	Assistance Requested
4/1/2020	Women-in-Construction	LaTonya-Klein	Contact-information-for-woman-owned-suppliers
4/28/2020	WBIC	Sam-Smith	Asked-for-information-to-provide-to-DBE-regarding- financing-programs-through-WBIC

Official Form DT1202 can be found here: https://wisconsindot.gov/pages/global-footer/formdocs/default.aspx

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 \$3.90 per gallon.

D Computing the Fuel Cost Adjustment

The engineer will compute the ratio CFI/BFI each month. If the ratio falls between 0.85 and 1.15, inclusive, no fuel adjustment will be made for that month. If the ratio is less than 0.85 a credit to the department will be computed. If the ratio is greater than 1.15 additional payment to the contractor will be computed. Credit or additional payment will be computed as follows:

- (1) The engineer will estimate the quantity of work done in that month under each of the contract items categorized in Section B.
- (2) The engineer will compute the gallons of fuel used in that month for each of the contract items categorized in Section B by applying the unit fuel usage factors shown in Section B.
- (3) The engineer will summarize the total gallons (Q) of fuel used in that month for the items categorized in Section B.
- (4) The engineer will determine the Fuel Cost Adjustment credit or payment from the following formula:

$$FA = \left(\frac{CFI}{BFI} - 1\right) x Q x BFI$$

(plus is payment to contractor; minus is credit to the department)

Where FA = Fuel Cost Adjustment (plus or minus)

CFI = Current Fuel Index BFI = Base Fuel Index

Q = Monthly total gallons of fuel

E Payment

A Fuel Cost Adjustment credit to the department will be deducted as a dollar amount each month from any sums due to the contractor. A Fuel Cost Adjustment payment to the contractor will be made as a dollar amount each month.

Upon completion of the work under the contract, any difference between the estimated quantities and the final quantities will be determined. An average CFI, calculated by averaging the CFI for all months that fuel cost adjustment was applied, will be applied to the quantity differences. The average CFI shall be applied in accordance with the procedure set forth in Section D.

Additional Special Provision 6 ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

416.2.4 Concrete Pavement Repair and Replacement

Replace the entire text with the following effective with the November 2022 letting:

- (1) Except as specified in 416.3.6 for inlaid rumble strips, use grade C concrete as specified in 501.
- (2) The engineer will allow the contractor to open to construction and public traffic when the concrete reaches 2000 psi.

416.2.5 Special High Early Strength Concrete Pavement Repair and Replacement

416.2.5.1 Composition and Proportioning of Concrete

Replace paragraph one with the following effective with the November 2022 letting:

(1) For the concrete mixture, use a minimum of 846 pounds of cementitious material per cubic yard of concrete. The engineer will allow the contractor to open to construction and public traffic when the concrete reaches 2000 psi. The contractor may add one or a combination of admixtures to the ingredients or to the mixture in order to obtain the required minimum strength and required air content. Do not retemper the concrete mixture.

455.2.4.3 Emulsified Asphalts

Replace paragraph one with the following effective with the November 2022 letting:

(1) Furnish material conforming, before dilution, to the following:

Anionic emulsified asphalts ^[1]	AASHTO M140
Cationic emulsified asphalts ^[1]	AASHTO M208
Polymer-modified cationic emulsified asphalts	AASHTO M316

[1] Non-tracking emulsified asphalts shall conform to TABLE 455-1 for the type and grade specified.

TABLE 455-1 Requirements for Non-Tracking Emulsified Asphalt

PRODUCT	ANTT	CNTT
Saybolt Viscosity at 77°F (25°C), (AASHTO T 59), SFS	15-100	15-100
Paddle Viscosity at 77°F (25°C), (AASHTO T 382), cPs ^[1]	30-200	30-200
Storage Stability Test, 24 hr, (AASHTO T 59), %	1 max	1 max
Residue by Distillation, 500 \pm 10 °F (260 \pm 5 °C), or Residue by Evaporation, 325 \pm 5 °F (163 \pm 3 °C), (AASHTO T 59), %	50 min	50 min
Sieve Test, No. 20 (850 μm), (AASHTO T 59), %	0.3	0.3
Penetration at 77°F (25°C), 100 g, 5 sec, (AASHTO T 49), dmm	10-40	10-40
Ash Content, (AASHTO T 111), %	1 max	1 max
Solubility in Trichlorethylene Test, (AASHTO T 44)[2]	97.5% min	97.5% min

^[1] Paddle Viscosity (AASHTO T 382) may be run in lieu of Saybolt Viscosity (AASHTO T 59).

455.2.5 Tack Coat

Replace paragraph one with the following effective with the November 2022 letting:

(1) Under the Tack Coat bid item, furnish type SS-1h, CSS-1h, QS-1h, CQS-1h, ANTT, CNTT, or modified emulsified asphalt with an "h" suffix, unless the contract specifies otherwise.

^[2] The solubility in Trichlorethylene test (AASHTO T 44) may be run in lieu of Ash Content (AASHTO T 111).

710.5.7 Corrective Action

710.5.7.1 Optimized Aggregate Gradations

Replace paragraph one with the following effective with the November 2022 letting:

- (1) If the contractor's 4-point running average or a department test result of the volumetric percent retained exceeds the tarantula curve limits by less than or equal to 1.0 percent on a single sieve size, notify the other party immediately and do one of the following:
 - Perform corrective action documented in the QC plan or as the engineer approves. Continue with the following:
 - 1. Document and provide corrective action results to the engineer as soon as they are available.
 - 2. Department will conduct two tests within the next business day after corrective action is complete.

If blended aggregate gradations are within the tarantula curve limits by the second department test:

- Continue with concrete production.
- Include a break in the 4-point running average.
- For Class I Pavements: The department will discontinue reduced frequency testing and will test at a frequency of 1 test per placement day. Once 5 consecutive samples are passing at the 1 test per placement day frequency, the reduced frequency testing will be reapplied.
- If blended aggregate gradations are not within the tarantula curve limits by the second department test and the contract requires an optimized aggregate gradation mix under 501.2.7.4.2.1(2), stop concrete production and submit a new optimized aggregate gradation mix design.
- If blended aggregate gradations are not within the tarantula curve limits by the second department test and the contract does not require an optimized aggregate gradation mix under 501.2.7.4.2.1(2), stop concrete production and submit either a new optimized aggregate gradation mix design or a combined aggregate gradation mix design.
- Submit a new optimized aggregate gradation mix design and perform the following:
 - 1. Restart control charts for the new mix design.
 - 2. Amend contractor Quality Control Plan

715.5 Payment

Replace the entire text with the following effective with the November 2022 letting:

715.5.1 General

(1) The department will pay incentive for concrete strength under the following bid items:

ITEM NUMBER	<u>DESCRIPTION</u>	<u>UNIT</u>
715.0502	Incentive Strength Concrete Structures	DOL
715.0603	Incentive Strength Concrete Barrier	DOL
715.0715	Incentive Flexural Strength Concrete Pavement	DOL
715.0720	Incentive Compressive Strength Concrete Pavement	DOL

- (2) Incentive payment may be more or less than the amount the schedule of items shows.
- (3) The department will administer disincentives for strength under the Disincentive Strength Concrete Structures, Disincentive Strength Concrete Barrier, Disincentive Flexural Strength Concrete Pavement, and Disincentive Compressive Strength Concrete Pavement, administrative items.
- (4) The department will adjust pay for each lot using PWL of the 28-day sublot average strengths for that lot. The department will measure PWL relative to strength lower specification limits as follows:
 - Compressive strength of 3700 psi for pavements.
 - Flexural strength of 650 psi for pavements.
 - Compressive strength of 4000 psi for structures and barrier.
- (5) The department will not pay a strength incentive for concrete that is nonconforming in another specified property, for ancillary concrete accepted based on tests of class I concrete, or for high early strength concrete unless placed in pavement gaps as allowed under 715.3.1.2.2.
- (6) Submit test results to the department electronically using MRS software. The department will verify contractor data before determining pay adjustments.
- (7) All coring and testing costs under 715.3.2.2 including filling core holes and providing traffic control during coring are incidental to the contract.

715.5.2 Pavements

715.5.2.1 Compressive

(1) The department will adjust pay for each lot using equation "QMP 3.01" as follows:

Percent within Limits (PWL)

>= 95 to 100

(0.1 x PWL) – 9.5

>= 85 to < 95

>= 30 to < 85

(1.5/55 x PWL) – 127.5/55

-1.50

- (2) The department will not pay incentive if the lot standard deviation is greater than 400 psi compressive.
- (3) For lots with a full battery of QC tests at less than 4 locations, there is no incentive, but the department will assess a disincentive based on the individual sublot average strengths. The department will reduce pay for sublots with an average strength below 3700 psi compressive by \$1.50 per square yard.
- (4) For integral shoulder pavement and pavement gaps accepted using tests from the adjacent travel lane, the department will adjust pay using strength results of the travel lane for integrally placed concrete shoulders and pavement gaps regardless of mix design and placement method, included in a lane-foot lot.

715.5.2.2 Flexural

(1) The department will adjust pay for each lot using equation "QMP 6.02" as follows:

Percent within Limits (PWL)

>= 95 to 100

>= 85 to < 95

>= 50 to < 85

< 50

Pay Adjustment (dollars per square yard)

(0.2 x PWL) – 19

(2.0/35 x PWL) – 170/35

-2.00

- (2) The department will not pay incentive if the lot standard deviation is greater than 60 psi flexural.
- (3) For lots with a full battery of QC tests at less than 4 locations, there is no incentive, but the department will assess a disincentive based on the individual sublot average strengths. The department will reduce pay for sublots with an average strength below 650 psi flexural by \$2.00 per square yard.
- (4) For integral shoulder pavement and pavement gaps accepted using tests from the adjacent travel lane, the department will adjust pay using strength results of the travel lane for integrally placed concrete shoulders and pavement gaps regardless of mix design and placement method, included in a lane-foot lot.

715.5.3 Structures and Cast-in-Place Barrier

(1) The department will adjust pay for each lot using equation "QMP 2.01" as follows:

Percent within Limits (PWL)

>= 99 to 100

>= 90 to < 99

>= 50 to < 90

<p>(7/8 x PWL) – 78.75
-35

- (2) The department will not pay incentive if the lot standard deviation is greater than 350 psi.
- (3) For lots with less than 4 sublots, there is no incentive, but the department will assess a disincentive based on the individual sublot average strengths. The department will reduce pay for sublots with an average strength below 4000 psi by \$35 per cubic yard.

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

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).
- II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

- 1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).
- b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training."

- 2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women

- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

- a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.
- b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
 - (1) Withholding monthly progress payments;
 - (2) Assessing sanctions;
 - (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.
- c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:

- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and

- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding (29 CFR 5.5)

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics,

including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records (29 CFR 5.5)

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or

subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

- (i) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;
- (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3;
- (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees (29 CFR 5.5)

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State

Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the

corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
 - d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- 8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.
- **9. Disputes concerning labor standards.** As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor

set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility (29 CFR 5.5)

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1 of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph 1 of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1 of this section. 29 CFR 5.5.
- * \$27 as of January 23, 2019 (See 84 FR 213-01, 218) as may be adjusted annually by the Department of Labor; pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990).

- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 of this section.
- **4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs 1 through 4 of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1 through 4 of this section. 29 CFR 5.5.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
 - (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or

- equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.
- 2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).
- 5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance

with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.326.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders

or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.326.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant 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 first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.
- e. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200.
 "First Tier Covered Transactions" refers to any covered
 transaction between a recipient or subrecipient of Federal
 funds and a participant (such as the prime or general contract).
 "Lower Tier Covered Transactions" refers to any covered
 transaction under a First Tier Covered Transaction (such as
 subcontracts). "First Tier Participant" refers to the participant

who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction 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 or agency entering into this transaction. 2 CFR 180.330.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant 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 or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

- (2) 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, 2 CFR 180.800;
- (3) 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 offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).
- (5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

- a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 180.1020, and 1200. You may contact the person to which this proposal is

submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction 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 or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.
- h. 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 participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant 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 or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

- (a) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355:
- (b) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (c) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier

subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

- 1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.
- 2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B) This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.
- 6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

NON-DISCRIMINATION PROVISIONS

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- **1. Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- **2. Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- **3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
- **4. Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
- **5. Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. Cancelling, terminating, or suspending a contract, in whole or in part.
- **6. Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, subrecipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English
 Proficiency, and resulting agency guidance, national origin discrimination includes discrimination
 because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take
 reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed.
 Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

- 1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.
- 2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

County	<u>%</u>	County	<u>%</u>	County	%
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

Goals for female participation for each trade: 6.9%

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

As referred to in this section, the Director means:

Director
Office of Federal Contract Compliance Programs
Ruess Federal Plaza
310 W. Wisconsin Ave., Suite 1115
Milwaukee, WI 53202

The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

ADDITIONAL FEDERAL-AID PROVISIONS

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

BUY AMERICA PROVISION

Buy America (as documented in M-22-11 from the Office of Management and Budget: https://www.whitehouse.gov/wp-content/uploads/2022/04/M-22-11.pdf) 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 smelting forward in the manufacturing process) must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America.

The exemption of 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 OMB M-22-11 and as referenced in CMM 228.5) must comply with Buy America. No exemptions (0.0%) are allowed.

The contractor shall take actions and provide documentation conforming to CMM 228.5 to ensure compliance with this Buy America provision.

https://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf

Upon completion of the project, certify to the engineer, in writing using department form DT4567 that all iron and steel, manufactured products, and construction materials conform to this Buy America provision.

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

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

CARGO PREFERENCE ACT REQUIREMENT

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

- (a) Agreement Clauses. "Use of United States-flag vessels:"
- (1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.
- (2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."
- (b) Contractor and Subcontractor Clauses. "Use of United States-flag vessels: The contractor agrees—"
- (1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- (2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- (3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF TRANSPORTATION AND SYSTEM DEVELOPMENT

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS FOR PROJECTS WITH FEDERAL AID

I. PREVAILING WAGE RATES

The attached U.S. Department of Labor (Davis-Bacon Minimum Wage Rates) furnishes the minimum prevailing wage rates pursuant to the Davis-Bacon and Related Acts. The wage rates shown are the minimum rates required by the contract to be paid during its life, however this is not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price will be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

II. COVERAGE OF TRUCK DRIVERS

Truck drivers are covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Drivers of a contractor or subcontractor for time spent working on the site of the work.
- Drivers of a contractor or subcontractor for time spent loading and/or unloading materials and supplies on the site of the work, if such time is not de minimis. https://www.dol.gov/whd/FOH/FOH Ch15.pdf
- Truck drivers transporting materials or supplies between a facility that is deemed part of the site of the work and the actual construction site.
- Truck drivers transporting portions of the building or work between a site established specifically for the performance of the contract where a significant portion of such building or work is constructed and the physical place where the building or work called for in the contract will remain.

Truck drivers are not covered by Davis-Bacon Minimum Wage Rates in the following circumstances:

- Material delivery truck drivers while off the site of the work.
- Drivers of a contractor or subcontractor traveling between a Davis-Bacon job and a commercial supply facility while they are off the site of the work."
- Truck drivers whose time spent on the site of the work is de minimis, such as only a few
 minutes at a time merely to pick up or drop off materials or supplies.

Details are available online at:

https://www.dol.gov/whd/recovery/pwrb/Tab9.pdf

https://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/trckng.aspx

III. POSTINGS AT THE SITE OF THE WORK

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

a. A copy of the contractor's Equal Employment Opportunity Policy.

All required documents shall be posted by the first day of work and be accurate and complete. Postings must be readable, in an area where they will be noticed, and maintained until the last day of work.

IV. RESOURCES

Required information regarding compliance with federal provisions is found in the following resources:

- FHWA-1273 included in this contract
- U.S. Department of Labor Prevailing Wage Resource Book
- U.S. Department of Labor Field Operations Handbook
- U.S. Code of Federal Regulations
- Any applicable law, Act, or Executive Order enacted by the federal government at the time of the letting of this contract

"General Decision Number: WI20220010 10/14/2022

Superseded General Decision Number: WI20210010

State: Wisconsin

Construction Type: Highway

Counties: Wisconsin Statewide.

HIGHWAY, AIRPORT RUNWAY & TAXIWAY CONSTRUCTION PROJECTS (does not include bridges over navigable waters; tunnels; buildings in highway rest areas; and railroad construction)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an |. The contractor must pay option is exercised) on or after January 30, 2022:

- . Executive Order 14026 generally applies to the contract.
- all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.

|If the contract was awarded on|. Executive Order 13658 or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:

- generally applies to the contract.
- The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at https://www.dol.gov/agencies/whd/government-contracts.

1	01/21/2022
2	02/04/2022
3	02/25/2022
4	03/11/2022
5	03/18/2022
6	04/29/2022
7	05/13/2022
8	06/17/2022
9	07/08/2022
10	07/22/2022
11	07/29/2022
12	08/12/2022
13	09/16/2022
14	10/14/2022

BRWI0001-002 06/01/2021

BRWI0006-002 06/01/2021

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES

	Rates	Fringes
BRICKLAYER	\$ 36.81	25.17
BRWI0002-002 06/01/2021		
ASHLAND, BAYFIELD, DOUGLAS, AND	IRON COUNTIES	
	Rates	Fringes
BRICKLAYER	\$ 44.35	23.89
BRWI0002-005 06/01/2021		

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	.\$ 37.73	24.15
BRWI0003-002 06/01/2021		
BROWN, DOOR, FLORENCE, KEWAUNEE,	MARINETTE, AND	OCONTO COUNTIES
	Rates	Fringes
BRICKLAYER	.\$ 37.03	24.95
BRWI0004-002 06/01/2021		
KENOSHA, RACINE, AND WALWORTH CO	UNTIES	
	Rates	Fringes
BRICKLAYER	•	26.03

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE, ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

	Rates	Fringes
BRICKLAYER	\$ 37.78	24.20
BRWI0007-002 06/01/2021		
GREEN, LAFAYETTE, AND ROCK COUNTI	IES	
	Rates	Fringes
BRICKLAYER	\$ 38.38	25.31
BRWI0008-002 06/01/2021		
MILWAUKEE, OZAUKEE, WASHINGTON, A	AND WAUKESHA COU	NTIES
	Rates	Fringes
BRICKLAYER	\$ 42.38	24.64
BRWI0011-002 06/01/2021		
CALUMET, FOND DU LAC, MANITOWOC,	AND SHEBOYGAN C	OUNTIES
	Rates	Fringes
BRICKLAYER	\$ 37.03	24.95
BARRON, BUFFALO, BURNETT, CHIPPEN PIERCE, POLK, RUSK, ST. CROIX, SA		
	Rates	Fringes
BRICKLAYER	\$ 36.31	25.67
BRWI0034-002 06/01/2021		
COLUMBIA AND SAUK COUNTIES		
	Rates	Fringes
BRICKLAYER		25.16
* CARP0068-011 05/02/2022		
BURNETT (W. of Hwy 48), PIERCE (W. 35, 48 & 65), AND ST. CROIX (W. o		
	Rates	Fringes
Carpenter & Piledrivermen		27.05
CARP0252-002 06/01/2016		
ADAMS DARRON DAVETELD (Franks	2 (2) BBOUR	DUEFALO

ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO, BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA,

CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except area bordering Michigan State Line), FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes
CARPENTER		
CARPENTER	.\$ 33.56	18.00
MILLWRIGHT	.\$ 35.08	18.35
PILEDRIVER	.\$ 34.12	18.00
CARP0252-010 06/01/2016		

ASHLAND COUNTY

	Rates	Fringes
Carpenters		
Carpenter	\$ 33.56	18.00
Millwright	\$ 35.08	18.35
Pile Driver	\$ 34.12	18.00

CARP0264-003 06/01/2016

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WAUKESHA, AND WASHINGTON COUNTIES

	Rates	Fringes
CARPENTER	.\$ 35.78	22.11
CARP0361-004 05/01/2018		

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

	Rates	Fringes
CARPENTER	\$ 36.15	20.43
CARRO227 004 06 /04 /2046		

CARP2337-001 06/01/2016

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

		Rates	Fringes
PILEDRIVER	MAN		
Zone	A\$	31.03	22.69
Zone	B\$	31.03	22.69

ELEC0014-002 05/29/2022

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK

(except Maryville, Colby, Unity, Sherman, Fremont, Lynn & Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST CROIX, SAWYER, TAYLOR, TREMPEALEAU, VERNON, AND WASHBURN COUNTIES

Rates Fringes

Electricians:.....\$ 38.49 22.09

ELEC0014-007 05/29/2022

REMAINING COUNTIES

	Kates	Fringes
Teledata System Installer\$	29.63	3%+16.18
Installer/Technician\$	28.50	15.92

Low voltage construction, installation, maintenance and removal of teledata facilities (voice, data, and video) including outside plant, telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated systems digital network).

ELEC0127-002 06/01/2021

KENOSHA COUNTY

Rates Fringes

Electricians:.....\$ 43.16 30%+12.70

ELEC0158-002 05/30/2021

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, MENOMINEE (East of a ine 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and Hutchins) COUNTIES

Rates Fringes

ELECTRICIAN.....\$ 36.14 29.75%+10.26

ELEC0159-003 05/30/2021

COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and Emmet Townships), GREEN, LAKE (except Townships of Berlin, Seneca, and St. Marie), IOWA, MARQUETTE (except Townships of Neshkoka, Crystal Lake, Newton, and Springfield), and SAUK COUNTIES

Rates Fringes

_ECTRICIAN.....\$ 43.38 23

ELEC0219-004 06/01/2019

FLORENCE COUNTY (Townships of Aurora, Commonwealth, Fern, Florence and Homestead) AND MARINETTE COUNTY (Township of Niagara)

	Rates	Fringes
Electricians: Electrical contracts over		
\$180,000 Electrical contracts under	.\$ 33.94	21.80
\$180,000	.\$ 31.75	21.73
ELEC0242-005 05/30/2021		
DOUGLAS COUNTY		
	Rates	Fringes
Electricians:		69.25%
ELEC0388-002 05/30/2021		
ADAMS, CLARK (Colby, Freemont, L Sherwood, Unity), FOREST, JUNEA MARINETTE (Beecher, Dunbar, Good West of a line 6 miles West of t County), ONEIDA, PORTAGE, SHAWAN AND WOOD COUNTIES	U, LANGLADE, LIN man & Pembine), he West boundary	NCOLN, MARATHON, MENOMINEE (Area / of Oconto
	Rates	Fringes
Electricians: ELEC0430-002 06/01/2022	.\$ 36.22	26%+11.24
RACINE COUNTY (Except Burlington	Township)	
	Rates	Fringes
Electricians:	.\$ 45.02	24.35
ELEC0494-005 06/01/2021		
MILWAUKEE, OZAUKEE, WASHINGTON,	AND WAUKESHA COL	JNTIES
	Rates	Fringes
Electricians:		
ELEC0494-006 06/01/2021		
CALUMET (Township of New Holstei including Chester Township), FON (Schleswig), and SHEBOYGAN COUNT	D DU LAC, MANITO	
	Rates	Fringes
Electricians:		22.74
ELEC0494-013 06/01/2021		

DODGE (East of Hwy 26 including Chester Twp, excluding Emmet

Twp), FOND DU LAC (Except Waupuin), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Sound & Communications		
Installer	\$ 22.39	18.80
Technician	\$ 32.49	20.26

Installation, testing, maintenance, operation and servicing of all sound, intercom, telephone interconnect, closed circuit TV systems, radio systems, background music systems, language laboratories, electronic carillion, antenna distribution systems, clock and program systems and low-voltage systems such as visual nurse call, audio/visual nurse call systems, doctors entrance register systems. Includes all wire and cable carrying audio, visual, data, light and radio frequency signals. Includes the installation of conduit, wiremold, or raceways in existing structures that have been occupied for six months or more where required for the protection of the wire or cable, but does not mean a complete conduit or raceway system. work covered does not include the installation of conduit, wiremold or any raceways in any new construction, or the installation of power supply outlets by means of which external electric power is supplied to any of the foregoing equipment or products

ELEC0577-003 06/01/2021

CALUMET (except Township of New Holstein), GREEN LAKE (N. part including Townships of Berlin, St Marie, and Seneca), MARQUETTE (N. part including Townships of Crystal Lake, Neshkoro, Newton, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

	Rates	Fringes
Electricians:	\$ 35.66	29.50%+10.00
ELEC0890-003 06/01/2021		

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE

RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES			
	Rates	Fringes	
Electricians:	\$ 39.00	25.95%+11.17	
ELEC0953-001 06/02/2019			
	Rates	Fringes	
Line Construction: (1) Lineman	\$ 47.53	21.43	
Operator(3) Equipment Operator(4) Heavy Groundman Driver.(5) Light Groundman Driver.	\$ 38.02 \$ 33.27 \$ 30.89	19.80 18.40 16.88 16.11	
(6) Groundsman	⊅ ∠0.14	14.60	

ENGI0139-005 06/01/2022

	Rates	Fringes
Power Equipment Operator		
Group 1	.\$ 43.27	25.95
Group 2	.\$ 42.77	25.95
Group 3	.\$ 42.27	25.95
Group 4	.\$ 42.01	25.95
Group 5	.\$ 41.72	25.95
Group 6	.\$ 35.82	25.95

HAZARDOUS WASTE PREMIUMS:

EPA Level ""A"" protection - \$3.00 per hour EPA Level ""B"" protection - \$2.00 per hour EPA Level ""C"" protection - \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, tower cranes, and derricks with or without attachments with a lifting capacity of over 100 tons; or cranes, tower cranes, and derricks with boom, leads and/or jib lengths measuring 176 feet or longer.

GROUP 2: Cranes, tower cranes and derricks with or without attachments with a lifting capacity of 100 tons or less; or cranes, tower cranes, and derricks with boom, leads, and/or jibs lengths measuring 175 feet or under and Backhoes (excavators) weighing 130,000 lbs and over; caisson rigs; pile driver; dredge operator; dredge engineer; Boat Pilot.

GROUP 3: Mechanic or welder - Heavy duty equipment; cranes with a lifting capacity of 25 tons or under; concrete breaker (manual or remote); vibratory/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pvt. spreader heavy duty (rubber tired); concrete spreader & distributor; automatic subgrader (concrete); concrete grinder & planing machine; concrete slipform curb & gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi & over); bridge paver; concrete conveyor system; concrete pump; Rotec type Conveyor; stabilizing mixer (self-propelled); shoulder widener; asphalt plant engineer; bituminious paver; bump cutter & grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer & scarifier; Backhoes (excavators) weighing under 130,000 lbs; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader; hydraulic backhoe (tractor type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller over 5 tons; percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches & A-frames; post driver; material hoist.

GROUP 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self propelled; tractor (mounted or towed compactors & light equipment); shouldering machine; self- propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint sawer (multiple blade) belting machine; burlap machine; texturing machine; tractor endloader (rubber tired) - light; jeep digger; forklift; mulcher; launch operator; fireman, environmental burner

GROUP 5: Air compressor; power pack; vibrator hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; Concrete proportioning plants; generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; Oiler, pump (over 3 inches); Drilling Machine Tender, day light machine

GROUP 6: Off-road material hauler with or without ejector.

. .

IRON0008-002 06/13/2022

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

Rates Fringes

IRONWORKER.....\$ 41.00 28.95

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0008-003 06/01/2021

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes

IRONWORKER.....\$ 40.57 28.40

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0383-001 06/05/2022

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST, GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA, JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON, MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA, WAUSHARA, AND WOOD COUNTIES

Rates Fringes

IRONWORKER.....\$ 39.00 28.58

IRON0498-005 06/01/2021

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:

Rates Fringes
IRONWORKER.....\$ 41.37 44.41

IRON0512-008 05/01/2022

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPEALEAU COUNTIES

	Rates	Fringes
IRONWORKER	\$ 41.00	33.11
IRON0512-021 05/01/2022		

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes
IRONWORKER	\$ 36.94	33.11

LABO0113-002 06/01/2022

MILWAUKEE AND WAUKESHA COUNTIES

	Rates	Fringes
LABORER		
Group	1\$ 32.6	55 23.09
Group	2\$ 32.8	30 23.09
Group	3\$ 33.6	23.09
Group	4\$ 33.1	.5 23.09
Group	5\$ 33.3	23.09
Group	6\$ 29.1	.4 23.09

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagperson; traffic control person

LAB00113-003 06/01/2022

	F	Rates	Fringes
LABORER			
Group	1\$	31.90	23.09
Group	2\$	32.00	23.09
Group	3\$	32.05	23.09
Group	4\$	32.25	23.09
Group	5\$	32.10	23.09
Group	6\$	28.99	23.09

LABORERS CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson and Traffic Control Person

LAB00113-011 06/01/2022

KENOSHA AND RACINE COUNTIES

	F	Rates	Fringes
LABORER			
Group	1\$	31.71	23.09
Group	2\$	31.86	23.09
Group	3\$	32.06	23.09
Group	4\$	32.03	23.09
Group	5\$	32.36	23.09
Group	6\$	28.85	23.09

LABORERS CLASSIFICATIONS:

GROUP 1: General laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster and Powderman

GROUP 6: Flagman; traffic control person

LAB00140-002 06/01/2022

ADAMS, ASHLAND, BARRON, BAYFIELD, BROWN, BUFFALO, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DOUGLAS, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IRON, JACKSON, JUNEAU, IOWA, JEFFERSON, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST. CROIX, TAYLOR, TREMPEALEAU, VERNON, VILLAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

		Rates	Fringes
LABORER			
Group	1	\$ 36.42	18.68
Group	2	\$ 36.52	18.68
Group	3	\$ 36.57	18.68
Group	4	\$ 36.77	18.68
Group	5	\$ 36.62	18.68
Group	6	\$ 33.05	18.68

LABORER CLASSIFICATIONS

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bitminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminous Worker (Dumper, Ironer, Smoother and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator, Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk and Pavement); Strike Off Man

GROUP 4: Line and Grade Secialist

GROUP 5: Blaster; powderman

GROUP 6: Flagperson; Traffic Control

LAB00464-003 06/01/2022

DANE COUNTY

	F	Rates	Fringes
LABORER			
Group	1\$	36.70	18.68

Group	2\$	36.80	18.68
Group	3\$	36.85	18.68
Group	4\$	37.05	18.68
Group	5\$	36.90	18.68
Group	6\$	33.05	18.68

LABORERS CLASSIFICATIONS:

GROUP 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence, and Bridge Builder; Landscaper; Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, and Utility Man); Batch Truck Dumper or Cement Handler; Bituminious Worker (Dumper, Ironer, Smoother, and Tamper); Concrete Handler

GROUP 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer

GROUP 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off Man

GROUP 4: Line and Grade Specialist

GROUP 5: Blaster; Powderman

GROUP 6: Flagperson and Traffic Control Person

PAIN0106-008 05/01/2022

ASHLAND, BAYFIELD, BURNETT, AND DOUGLAS COUNTIES

	F	Rates	Fringes
Painters:			
New:			
Brush,	Roller\$	33.99	22.70
Spray,	Sandblast, Steel\$	34.59	22.70
Repaint	:		
Brush,	Roller\$	33.09	22.70
Spray,	Sandblast, Steel\$	32.49	22.70

^{*} PAIN0108-002 06/01/2022

RACINE COUNTY

F	Rates	Fringes
Painters:		
Brush, Roller\$	39.60	21.79
Spray & Sandblast\$	40.60	21.79

PAIN0259-002 05/01/2008

BARRON, CHIPPEWA, DUNN, EAU CLAIRE, PEPIN, PIERCE, POLK, RUSK, SAWYER, ST. CROIX, AND WASHBURN COUNTIES

	Rates	Fringes	
PAINTER	\$ 24.11	12.15	

BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES

	Pates	Fringes
		-
PAINTER	.\$ 22.03 	12.45
* PAIN0781-002 06/01/2022		
JEFFERSON, MILWAUKEE, OZAUKEE, W	ASHINGTON, AN	ND WAUKESHA COUNTIES
	Rates	Fringes
Painters:		
Bridge	•	24.80
Brush Spray & Sandblast		24.80 24.80
PAIN0802-002 06/01/2021		
COLUMBIA, DANE, DODGE, GRANT, GR ROCK, AND SAUK COUNTIES	EEN, IOWA, LA	AFAYETTE, RICHLAND,
	Rates	Fringes
PAINTER Brush	.\$ 29.98	18.78
PREMIUM PAY: Structural Steel, Spray, Bridghour.	es = \$1.00	additional per
PAIN0802-003 06/01/2021		
ADAMS, BROWN, CALUMET, CLARK, DOU LAKE, IRON, JUNEAU, KEWAUNEE, LAI MARATHON, MARINETTE, MARQUETTE, I OUTAGAMIE, PORTAGE, PRICE, SHAWAI WAUSHARA, WAUPACA, WINNEBAGO, ANI	NGLADE, LINCO MENOMINEE, O NO, SHEBOYGA	DLN, MANITOWOC, DCONTO, ONEIDA, NN, TAYLOR, VILAS,
	Rates	Fringes
PAINTER	•	18.78
* PAIN0934-001 06/01/2022		
KENOSHA AND WALWORTH COUNTIES		
	Rates	Fringes
Painters:		
Brush		24.69 24.69
Spray Structural Steel		24.69
DATN1011 002 00 /00 /2024		
PAIN1011-002 06/06/2021		

FLORENCE COUNTY

	Rates	Fringes
Painters:	•	14.38
PLAS0599-010 06/01/2021		
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area 1	\$ 42.06	20.87
Area 2 (BAC)	\$ 37.73	23.80
Area 3	\$ 38.74	22.46
Area 4	\$ 38.59	22.66
Area 5	\$ 38.16	22.98
Area 6	\$ 34.94	26.36

AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPEALEAU, AND VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK COUNTIES

AREA 6: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/01/2021

	Rates	Fringes
TRUCK DRIVER 1 & 2 Axles 3 or more Axles; Euclids, Dumptor & Articulated,	.\$ 32.57	23.81
Truck Mechanic	.\$ 32.72	23.81
WELL DRILLER	.\$ 16.52	3.70

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this

contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which

these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISIO"

"General Decision Number: WI20220008 10/14/2022

Superseded General Decision Number: WI20210008

State: Wisconsin

Construction Types: Heavy (Sewer and Water Line and Tunnel)

Counties: Wisconsin Statewide.

TUNNEL, SEWER & WATER LINE CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

IIf the contract is entered linto on or after January 30, 2022, or the contract is renewed or extended (e.g., an |. The contractor must pay option is exercised) on or after January 30, 2022:

- Executive Order 14026 generally applies to the contract.
- all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.

|If the contract was awarded on|. Executive Order 13658 or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:

- generally applies to the contract.
- The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at https://www.dol.gov/agencies/whd/government-contracts.

Modification Number

Publication Date

0

01/07/2022

2	02/04/2022
3	02/25/2022
4	03/11/2022
5	03/18/2022
6	04/29/2022
7	06/17/2022
8	07/08/2022
9	07/15/2022
10	07/29/2022
11	08/05/2022
12	08/12/2022
13	09/16/2022
14	10/14/2022

BRWI0001-002 06/01/2021

CRAWFORD, JACKSON, JUNEAU, LA CROSSE, MONROE, TREMPEALEAU, AND VERNON COUNTIES

	Rates	Fringes
BRICKLAYER	\$ 36.81	25.17
BRWI0002-002 06/01/2021		
ASHLAND, BAYFIELD, DOUGLAS, AND	IRON COUNTIES	
	Rates	Fringes
BRICKLAYER	\$ 44.35	23.89

BRWI0002-005 06/01/2021

ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

	Rates	Fringes	
CEMENT MASON/CONCRETE FINISHER	.\$ 37.73	24.15	
BRWI0003-002 06/01/2021			
BROWN, DOOR, FLORENCE, KEWAUNEE,	MARINETTE, AND	OCONTO COUNTIES	
	Rates	Fringes	
BRICKLAYER	.\$ 37.03	24.95	
BRWI0004-002 06/01/2021			
KENOSHA, RACINE, AND WALWORTH COUNTIES			
	Rates	Fringes	
BRICKLAYER	.\$ 41.30	26.03	
BRWI0006-002 06/01/2021			

ADAMS, CLARK, FOREST, LANGLADE, LINCOLN, MARATHON, MENOMINEE, ONEIDA, PORTAGE, PRICE, TAYLOR, VILAS AND WOOD COUNTIES

	Rates	Fringes	
BRICKLAYER	•	24.20	
BRWI0007-002 06/01/2021			
GREEN, LAFAYETTE, AND ROCK COUNT	IES		
	Rates	Fringes	
BRICKLAYER	.\$ 38.38	25.31	
BRWI0008-002 06/01/2021			
MILWAUKEE, OZAUKEE, WASHINGTON,	AND WAUKESHA C	OUNTIES	
	Rates	Fringes	
BRICKLAYER BRWI0009-001 06/01/2021		24.64	
GREEN LAKE, MARQUETTE, OUTAGAMIE, SHAWANO, WAUPACA, WASHARA, AND WINNEBAGO COUNTIES			
	Rates	Fringes	
BRICKLAYER BRWI0011-002 06/01/2021	.\$ 37.03	24.95	
CALUMET, FOND DU LAC, MANITOWOC,	AND SHEBOYGAN	COUNTIES	
	Rates	Fringes	
BRICKLAYER	.\$ 37.03	24.95	
BRWI0013-002 06/01/2021			
DANE, GRANT, IOWA, AND RICHLAND	COUNTIES		
	Rates	Fringes	
BRICKLAYER	•	25.16	
BRWI0019-002 06/01/2021			
BARRON, BUFFALO, BURNETT, CHIPPE PIERCE, POLK, RUSK, ST. CROIX, S			
	Rates	Fringes	
BRICKLAYER	.\$ 36.31	25.67	
BRWI0021-002 06/01/2021	-	· 	
DODGE AND JEFFERSON COUNTIES			

Rates Fringes

BRICKLAYER	\$ 37.75	25.92	
BRWI0034-002 06/01/2021			
COLUMBIA AND SAUK COUNTIES			
	Rates	Fringes	
BRICKLAYER		25.16	
* CARP0068-011 05/02/2022			
BURNETT (W. of Hwy 48), PIERCE (W 35, 48 & 65), AND ST. CROIX (W. o			
	Rates	Fringes	
Carpenter & Piledrivermen		27.05	
CARP0252-002 06/01/2016			
ADAMS, BARRON, BAYFIELD (Eastern 2/3), BROWN, BUFFALO, BURNETT (E. of Hwy 48), CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DANE, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE (except area bordering Michigan State Line), FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, IRON, JACKSON, JEFFERSON, JUNEAU, KEWAUNEE, LA CROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE (except N.E. corner), MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE (E. of Hwys 29 & 65), POLK (E. of Hwys 35, 48 & 65), PORTAGE, PRICE, RICHLAND, ROCK, RUSK, SAUK, SAWYER, SHAWANO, SHEBOYGAN, ST CROIX (E. of Hwy 65), TAYLOR, TREMPEALEAU, VERNON, VILAS, WALWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES			
	Rates	Fringes	
CARPENTER CARPENTER	\$ 35.08 \$ 34.12	18.00 18.35 18.00	
ASHLAND COUNTY			
	Rates	Fringes	
Carpenters Carpenter Millwright Pile Driver	\$ 35.08	18.00 18.35 18.00	
CARP0264-003 06/01/2016			
KENOSHA, MILWAUKEE, OZAUKEE, RACI COUNTIES	NE, WAUKESHA, AN	D WASHINGTON	

CARP0361-004 05/01/2018

BAYFIELD (West of Hwy 63) AND DOUGLAS COUNTIES

Rates Fringes

CARPENTER......\$ 36.15 20.43

CARP2337-001 06/01/2016

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON

ZONE B: KENOSHA & RACINE

	Rates	Fringes
PILEDRIVERMAN		
Zone A	\$ 31.03	22.69
Zone B	\$ 31.03	22.69

CARP2337-003 06/01/2019

	Rates	Fringes
MILLWRIGHT		
Zone A	\$ 33.58	21.53
Zone B	\$ 33.58	21.53

ZONE DEFINITIONS

ZONE A: MILWAUKEE, OZAUKEE, WAUKESHA AND WASHINGTON COUNTIES

ZONE B: KENOSHA & RACINE COUNTIES

ELEC0014-002 05/29/2022

ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Maryville, Colby, Unity, Sherman, Fremont, Lynn & Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST CROIX, SAWYER, TAYLOR, TREMPEALEAU, VERNON, AND WASHBURN COUNTIES

	Rates	Fringes
Electricians:	.\$ 38.49	22.09
ELEC0127-002 06/01/2021		

KENOSHA COUNTY

	Rates	Fringes	
Electricians:	\$ 43.16	30%+12.70	
ELEC0158-002 05/30/2021			

BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE(Wausuakee and area South thereof), OCONTO, MENOMINEE (East of a ine 6 miles West of the West boundary of Oconto County), SHAWANO (Except Area North of Townships of Aniwa and

	Rates	Fringes	
ELECTRICIAN			
ELEC0159-003 05/30/2021			
COLUMBIA, DANE, DODGE (Area West of Hwy 26, except Chester and Emmet Townships), GREEN, LAKE (except Townships of Berlin, Seneca, and St. Marie), IOWA, MARQUETTE (except Townships of Neshkoka, Crystal Lake, Newton, and Springfield), and SAUK COUNTIES			
	Rates	Fringes	
ELECTRICIAN		23.13	
ELEC0219-004 06/01/2019			
FLORENCE COUNTY (Townships of Aur Florence and Homestead) AND MARIN Niagara)			
	Rates	Fringes	
Electricians: Electrical contracts over \$180,000 Electrical contracts under \$180,000		21.80 21.73	
ELEC0242-005 05/30/2021			
DOUGLAS COUNTY			
	Rates	Fringes	
Electricians:	\$ 41.37	69.25%	
ELEC0388-002 05/30/2021			
ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Beecher, Dunbar, Goodman & Pembine), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Aniwa and Hutchins), VILAS AND WOOD COUNTIES			
	Rates	Fringes	
Electricians:	•	26%+11.24	
ELEC0430-002 06/01/2022			
RACINE COUNTY (Except Burlington	Township)		
	Rates	Fringes	
Electricians:	\$ 45.02	24.35	

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Electricians:	\$ 44.39	25.67
FLEC0494-006 06/01/2021		

ELEC0494-006 06/01/2021

CALUMET (Township of New Holstein), DODGE (East of Hwy 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

Electricians:	\$ 37.91	22.74	
	Rates	Fringes	

ELEC0577-003 06/01/2021

CALUMET (except Township of New Holstein), GREEN LAKE (N. part including Townships of Berlin, St Marie, and Seneca), MARQUETTE (N. part including Townships of Crystal Lake, Neshkoro, Newton, and Springfield), OUTAGAMIE, WAUPACA, WAUSHARA, AND WINNEBAGO COUNTIES

	Rates	Fringes
Electricians:	\$ 35.66	29.50%+10.00
ELEC0890-003 06/01/2021		

2025 (5) 7) (225)

DODGE (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington Township), ROCK AND WALWORTH COUNTIES

	Rates	Fringes
Electricians:	.\$ 39.00	25.95%+11.17

ENGI0139-003 06/06/2022

REMAINING COUNTIES

	Rates	Fringes
Power Equipment Operator		
Group 1	\$ 45.22	24.85
Group 2	\$ 43.97	24.85
Group 3	\$ 41.57	24.85
Group 4	\$ 41.04	24.85
Group 5	\$ 38.97	24.85
Group 6	\$ 37.44	24.85

HAZARDOUS WASTE PREMIUMS:

EPA Level ""A"" Protection: \$3.00 per hour EPA Level ""B"" Protection: \$2.00 per hour EPA Level ""C"" Protection: \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of over 100 tons;

Cranes, Tower Cranes, and Derricks with boom, leads and/or jib lengths 176 ft or longer.

- GROUP 2: Backhoes (Excavators) weighing 130,00 lbs and over; Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or less; Cranes, Tower Cranes, and Derricks with boom, leads, and/or jib lengths 175 ft or less; Caisson Rigs; Pile Driver
- GROUP 3: Backhoes (Excavators) weighing under 130,000 lbs; Travelling Crane (bridge type); Milling Machine; Concrete Paver over 27 E; Concrete Spreader and Distributor; Concrete Laser Screed; Concrete Grinder and Planing Machine; Slipform Curb and Gutter Machine; Boring Machine (Directional); Dredge Operator; Skid Rigs; over 46 meter Concrete Pump.
- GROUP 4: Hydraulic Backhoe (tractor or truck mounted); Hydraulic Crane, 10 tons or less; Tractor, Bulldozer, or End Loader (over 40 hp); Motor Patrol; Scraper Operator; Bituminous Plant and Paver Operator; Screed-Milling Machine; Roller over 5 tons; Concrete pumps 46 meter and under; Grout Pumps; Rotec type machine; Hydro Blaster, 10,000 psi and over; Rotary Drill Operator; Percussion Drilling Machine; Air Track Drill with or without integral hammer; Blaster; Boring Machine (vertical or horizontal); Side Boom; Trencher, wheel type or chain type having 8 inch or larger bucket; Rail Leveling Machine (Railroad); Tie Placer; Tie Extractor; Tie Tamper; Stone Leveler; Straddle Carrier; Material Hoists; Stack Hoist; Man Hoists; Mechanic and Welder; Off Road Material Haulers.
- GROUP 5: Tractor, Bulldozer, or Endloader (under 40 hp); Tampers -Compactors, riding type; Stump Chipper, large; Roller, Rubber Tire; Backfiller; Trencher, chain type (bucket under 8 inch); Concrete Auto Breaker, large; Concrete Finishing Machine (road type); Concrete Batch Hopper; Concrete Conveyor Systems; Concrete Mixers, 14S or over; Pumps, Screw Type and Gypsum); Hydrohammers, small; Brooms and Sweeeprs; Lift Slab Machine; Roller under 5 tons; Industrial Locomotives; Fireman (Pile Drivers and Derricks); Pumps (well points); Hoists, automatic; A-Frames and Winch Trucks; Hoists (tuggers); Boats (Tug, Safety, Work Barges and Launches); Assistant Engineer
- GROUP 6: Shouldering Machine Operator; Farm or Industrial Tractor mounted equipment; Post Hole Digger; Auger (vertical and horizontal); Skid Steer Loader with or without attachments; Robotic Tool Carrier with or without attachments; Power Pack Vibratory/Ultra Sound Driver and Extractor; Fireman (Asphalt Plants); Screed Operator; Stone Crushers and Screening Plants; Air, Electric, Hydraulic Jacks (Slip Form); Prestress Machines; Air Compressor, 400 CFM or over; Refrigeration Plant/Freese Machine; Boiler Operators (temporary heat); Forklifts; Welding Machines; Generators; Pumps over 3""; Heaters, Mechanical; Combination small equipment operator; Winches, small electric; Oiler; Greaser; Rotary Drill Tender; Conveyor; Elevator Operator

s Fringes
54 24.85
76 24.85
81 24.85
76 24.85
36 24.85

HAZARDOUS WASTE PREMIUMS:

EPA Level ""A"" Protection: \$3.00 per hour EPA Level ""B"" Protection: \$2.00 per hour EPA Level ""C"" Protection: \$1.00 per hour

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, Tower Cranes, and Derricks with or without attachments, with a lifting capacity of over 100 tons; or Cranes, Tower Cranes, and Derricks with boom, leads, and/or jib lengths measuring 176 feet or longer; Backhoes (Excavators) 130,000 lbs and over; Caisson Rigs and Pile Drivers

GROUP 2: Cranes, Tower Cranes and Derricks with or without attachments with a lifting capacity of 100 tons or under; or Cranes, Tower Cranes, and Derricks with boom, lead, and\or jib lengths measuring 175 feet or under; Backhoes (Excavators) under 130,000 lbs; Skid Rigs; Dredge Operator: Traveling Crane (Bridge type); Concrete Paver over 27 E; Concrete Spreader and Distributor; Concrete Pumps and Boring Machines (directional)

GROUP 3: Material Hoists; Stack Hoists; Tractor or Truck mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane, 5 tons or under; Manhoist; Tractor over 40 hp; Bulldozer over 40 hp; Endloader over 40 hp; Forklift, 25 ft and over; Motor Patrol; Scraper Operator; Sideboom; Straddle Carrier; Mechanic and Welder; Bituminous Plant and Paver Operator; Roller over 5 tons; Percussion Drill Operator; Rotary Drill Operator; Blaster; Air Track Drill; Trencher (wheel type or chain type having over 8 inch bucket); Elevator; Milling Machine and Boring Machine (horizontal or vertical); Backhoe Mounted Compactor

GROUP 4: Backfiller; Concrete Auto Breaker (large); Concrete Finishing Machine (road type); Roller, Rubber Tire; Concrete Batch Hopper; Concrete Conveyor System; Concrete Mixers (14S or over); Screw type Pumps and Gypsum Pumps; Grout Pumps; Tractor, Bulldozer, End Loader, under 40 hp; Pumps (well points); Trencher (chain type 8 inch or smaller bucket; Industrial Locomotives; Roller under 5 tons; Fireman (Piledrivers and Derricks); Robotic Tool Carrier with or without attachments.

GROUP 5: Hoists (Automatic); Forklift, 12 ft to 25 ft; Tamper-Compactors, riding type; A-Frame andWinch Trucks; Concrete Auto Breaker; Hydrohammer, small; Brooms and Sweepers; Hoist (Tuggers); Stump Chipper, large; Boats (Tug, Safety, Work Barges and Launch); Shouldering Machine Operator; Screed Operator; Farm or Industrial Tractor; Post Hole Digger; Stone Crushers and Screening Plants; Firemen (Asphalt Plants); Air Compressor (400 CFM or over); Augers (vertical and horizontal); Generators, 150 KW and over; Air, Electric Hydraulic Jacks (Slipform); Prestress

Machines; Skid Steer Loader with or without attachments; Boiler operators (temporary heat); Forklift, 12 ft and under; Screed Operator Milling Machine; Refrigeration Plant/Freeze Machine; Power Pack Vibratory/Ultra Sound Driver and Extractor; Generators under 150 KW; Combination small equipment operator; Compressors under 400 CFM; Welding Machines; Heaters, Mechanical; Pumps; Winches, Small Electric; Oiler and Greaser; Conveyor; High pressure utility locating machine (daylighting machine).

IRON0008-002 06/13/2022

BROWN, CALUMET, DOOR, FOND DU LAC, KEWAUNEE, MANITOWOC, MARINETTE, OCONTO, OUTAGAMI, SHAWANO, SHEBOYGAN, AND WINNEBAGO COUNTIES:

Rates Fringes

IRONWORKER.....\$ 41.00 28.95

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0008-003 06/01/2021

KENOSHA, MILWAUKEE, OZAUKEE, RACINE, WALWORTH (N.E. 2/3), WASHINGTON, AND WAUKESHA COUNTIES

Rates Fringes

IRONWORKER.....\$ 40.57 28.40

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

IRON0383-001 06/05/2022

ADAMS, COLUMBIA, CRAWFORD, DANE, DODGE, FLORENCE, FOREST, GRANT, GREENE, (Excluding S.E. tip), GREEN LAKE, IOWA, JEFFERSON, JUNEAU, LA CROSSE, LAFAYETTE, LANGLADE, MARATHON, MARQUETTE, MENOMINEE, MONROE, PORTAGE, RICHLAND, ROCK (Northern area, vicinity of Edgerton and Milton), SAUK, VERNON, WAUPACA, WAUSHARA, AND WOOD COUNTIES

Rates Fringes

IRONWORKER.....\$ 39.00 28.58

IRON0498-005 06/01/2021

GREEN (S.E. 1/3), ROCK (South of Edgerton and Milton), and WALWORTH (S.W. 1/3) COUNTIES:

Rates Fringes

IRONWORKER.....\$ 41.37 44.41

IRON0512-008 05/01/2022

BARRON, BUFFALO, CHIPPEWA, CLARK, DUNN, EAU CLAIRE, JACKSON, PEPIN, PIERCE, POLK, RUSK, ST CROIX, TAYLOR, AND TREMPEALEAU COUNTIES

	Rates	Fringes	
IRONWORKER	\$ 41.00	33.11	
IRON0512-021 05/01/2022			

ASHLAND, BAYFIELD, BURNETT, DOUGLAS, IRON, LINCOLN, ONEIDA, PRICE, SAWYER, VILAS AND WASHBURN COUNTIES

	Rates	Fringes	
IRONWORKER	\$ 36.94	33.11	
LABO0113 004 06/01/2022			_

LABO0113-004 06/01/2022

MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

	Rates	Fringes
Laborers: (Open Cut) Group 1	i 17.62	21.98
Group 2		21.98
Group 3	23.43	21.98
Group 4	32.80	21.98
Group 5	32.94	21.98
Group 6	33.00	21.98
Group 7	36.85	21.98
Group 8	39.67	21.98
Group 9	40.31	21.98

LABORERS CLASSIFICATIONS [OPEN CUT]

GROUP 1: Yard Laborer

GROUP 2: Landscaper

GROUP 3: Flag Person

GROUP 4: Paving Laborer

GROUP 5: General Laborer on Surface; Top Man

GROUP 6: Mud Mixer

GROUP 7: Mucker; Form Stripper; Bottom Digger and Misc; Bottom Man and Welder on Surface

GROUP 8: Concrete Manhole Builder; Caisson Worker; Miner; Pipe Layer; Rock Driller and Joint Man; Timber Man and Concrete Brusher; Bracer in Trench Behind Machine & Tight Sheeting; Concrete Formsetter and Shoveler; Jackhammer Operator

GROUP 9: Blaster

.....

KENOSHA AND RACINE COUNTIES

	Rates	Fringes
Laborers:		
Group	1\$ 24.29	21.98
Group	2\$ 30.22	21.98
Group	3\$ 34.42	21.98
Group	4\$ 36.19	21.98

TUNNEL WORK UNDER COMPRESSED AIR: 0-15 lbs add \$1.00, 15-30 lbs add \$2.00, over 30 lbs add \$3.00

LABORERS CLASSIFICATIONS

GROUP 1: Flagperson

GROUP 2: Top Man, General Laborer, Wellpoint Installation, Wire Mesh and Reinforcement, Concrete Worker, Form Stripper, Strike-off Work

GROUP 3: Machine and Equipment Operator, Sheeting, Form Setting, Patch Finisher, Bottom Man, Joint Sawer, Gunnite Man, Manhole Builder, Welder-Torchman, Blaster, Caulker, Bracer, Bull Float, Conduit Worker, Mucker and Car Pusher, Raker and Luteman, Hydraulic Jacking of Shields, Shield Drivers, Mining Machine, Lock Tenders, Mucking Machine Operator, Motor Men & Gauge Tenders and operation of incidental Mechanical Equipment and all Power Driven Tools

GROUP 4: Pipelayer, Miner and Laser Operator

LAB00113-008 06/01/2022

MILWAUKEE, OZAUKEE, WASHINGTON & WAUKESHA COUNTIES

ı	Rates	Fringes
Laborers: (Tunnel-Free Air)	22 42	21 00
Group 1\$		21.98
Group 2\$		21.98
Group 3\$		21.98
Group 4\$		21.98
Group 5\$	36.99	21.98
Group 6\$	39.67	21.98
Group 7\$	40.31	21.98

LABORERS CLASSIFICATIONS [TUNNEL - FREE AIR]:

GROUP 1: Flagperson

GROUP 2: General Laborer on surface; Tower Man

GROUP 3: Saw Man; Top Man

GROUP 4: Form Stripper; Car Pusher

GROUP 5: Mucker; Dinkey; Welder (rate on surface)

GROUP 6: Concrete Manhole Builder; Mucking Machine; Miner; Mining Machine; Welder; Rock Driller; Concrete Buster; Jack

Hammer Operator; Caisson Worker; Pipelayer and Joint Man; Bracerman

GROUP 7: Blaster

MILWAUKEE, OZAUKEE, WASHINGTON & WAUKESHA COUNTIES

	Rates	Fringes
aborers: (Tunnel -		
COMPRESSED AIR 0 - 15 lbs.)		
Group 1\$	23.43	21.98
Group 2\$	32.94	21.98
Group 3\$	37.39	21.98
Group 4\$	38.19	21.98
Group 5\$	38.31	21.98
Group 6\$	41.01	21.98
Group 7\$	41.63	21.98

LABORERS CLASSIFICATIONS [TUNNEL - COMPRESSED AIR]:

GROUP 1: Flagperson

GROUP 2: General Laborer on surface

GROUP 3: Lock Tender on surface

GROUP 4: Form Stripper; Car Pusher

GROUP 5: Mucker; Dinkey

GROUP 6: Mucking Machine; Miner; Mining Machine; Welder & Rock Driller; Lock Tender in tunnel; Concrete Buster; Jack Hammer Operator; Caisson Worker; Pielayer and Joint Man; Bracerman; Nozzle Man on Gunite; Timber Man; Concrete Brusher

GROUP 7: Blaster

NOTE: Hazardous & Toxic Waste Removal: add \$0.15 per hour.

LAB00140-005 06/06/2022

ADAMS, ASHLAND, BARRON, BROWN, BUFFALO, CALUMET, CHIPPEWA, CLARK, COLUMBIA, CRAWFORD, DODGE, DOOR, DUNN, EAU CLAIRE, FLORENCE, FOND DU LAC, FOREST, GRANT, GREEN, GREEN LAKE, IOWA, JACKSON, JEFFERSON, JUNEAU, LACROSSE, LAFAYETTE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, MONROE, OCONTO, ONEIDA, OUTAGAMIE, PEPIN, PIERCE, POLK, PORTAGE, PRICE, RICHLAND, ROCK, RUSK, ST CROIX, SAUK, SAWYER, SHAWANO, SHEBOYGAN, TAYLOR, TREMMPEALEAU, VERNON, VILAS, WALWWORTH, WASHBURN, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

Fringes

^{*} LAB00113-009 06/01/2022

^{*}Compressed Air 15 - 30 lbs add \$2.00 to all classifications

^{*}Compressed Air over 30 lbs add \$3.00 to all classifications

LABORER (SEWER & WATER)

Group 1\$	31.48	18.68
Group 2\$	33.33	18.68
Group 3\$	33.53	18.68
Group 4\$	34.28	18.68

FOR ALL TUNNEL WORK UNDER COMPRESSED AIR: 0-15 lbs add \$1.00, 15-30 lbs add \$2.00, over 30 lbs add \$3.00

LABORER CLASSIFICATIONS:

GROUP 1: Flagperson

GROUP 2: General Laborer, Wellpoint Installation; Form Stripper; Strike Off worker

GROUP 3: Sheeting Formsetting; Patch Finisher; Bottom Man; Joint Sawer; Gunnite Man; Manhole Builder; Welder; Torchman; Blaster; Caulker Bracer; Bull Float; Mucker and Car Pusher; Raker and Luteman; Hydraulic jacking of shields, Shield Drivers; Mining Machine; Lock Tenders; Mucking Machine Operators; Motor Men and Gauge Tenders; Power Tool Operators

GROUP 4: Pipelayer, Miner, and Laser Operator

LAB00464-002 06/06/2022

DANE AND DOUGLAS COUNTIES

	F	Rates	Fringes
LABORER			
Group	1\$	31.38	18.68
Group	2\$	33.58	18.68
Group	3\$	33.78	18.68
Group	4\$	34.53	18.68

FOR ALL TUNNEL WORK UNDER COMPRESSED AIR: 0 - 15 lbs add \$1.00, 15- 30 lbs add \$2.00, over 30 lbs add \$3.00

LABORERS CLASSIFICATIONS:

GROUP 1: Flagperson

GROUP 2: General Laborer; Wellpoint Installation; Concrete Worker; Form Stripper; Strike Off worker

GROUP 3: Sheeting Formsetting; Patch Finisher; Bottom Man; Joint Sawer; Gunnite Man; Manhole Builder; Welder; Torchman; Blaster; Caulker Bracer; Bull Float; Mucker and Car Pusher; Raker and Luteman; Hydraulic jacking of shields, Shield Dirvers; Mining Machine; Lock Tenders; Mucking Machine Operators; Motor Men and Gauge Tenders; Power Tool Operators

GROUP 4: Pipelayer, Miner, and Laser Operator

LAB01091-010 06/06/2022

BAYFIELD, BURNETT, IRON, SAWYER, AND WASHBURN COUNTIES

	Rates	Fringes
Laborers: (SEWER & WATER)		
Group 1	\$ 31.17	18.68
Group 2	\$ 33.23	18.68
Group 3	\$ 33.43	18.68
Group 4	\$ 34.18	18.68

FOR ALL TUNNEL WORK UNDER COMPRESSED AIR:

0 - 15 lbs add \$1.00, 15-30 lbs add \$2.00, over 30 lbs add \$3.00

LABORERS CLASSIFICATIONS:

GROUP 1: Flagperson

GROUP 2: Laborers, Wellpoint Installation; Form Stripper; Strike Off worker

GROUP 3: Sheeting Formsetting; Patch Finisher; Bottom Man; Joint Sawer; Gunnite Man; Manhole Builder; Welder; Torchman; Blaster; Caulker Bracer; Bull Float; Mucker and Car Pusher; Raker and Luteman; Hydraulic jacking of shields, Shield Dirvers; Mining Machine; Lock Tenders; Mucking Machine Operators; Motor Men and Gauge Tenders; Power Tool Operators

GROUP 4: Pipelayer, Miner, and Laser Operator

PLAS0599-010 06/01/2021

ı	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
Area 1\$	42.06	20.87
Area 2 (BAC)\$	37.73	23.80
Area 3\$	38.74	22.46
Area 4\$	38.59	22.66
Area 5\$	38.16	22.98
Area 6\$	34.94	26.36

AREA DESCRIPTIONS

AREA 1: BAYFIELD, DOUGLAS, PRICE, SAWYER, AND WASHBURN COUNTIES

AREA 2: ADAMS, ASHLAND, BARRON, BROWN, BURNETT, CALUMET, CHIPPEWA, CLARK, COLUMBIA, DODGE, DOOR, DUNN, FLORENCE, FOND DU LAC, FOREST, GREEN LAKE, IRON, JEFFERSON, KEWAUNEE, LANGLADE, LINCOLN, MANITOWOC, MARATHON, MARINETTE, MARQUETTE, MENOMINEE, OCONTO, ONEIDA, OUTAGAMIE, POLK, PORTAGE, RUSK, ST CROIX, SAUK, SHAWANO, SHEBOYGAN, TAYLOR, VILAS, WALWORTH, WAUPACA, WAUSHARA, WINNEBAGO, AND WOOD COUNTIES

AREA 3: BUFFALO, CRAWFORD, EAU CLAIRE, JACKSON, JUNEAU, LA CROSSE MONROE, PEPIN, PIERCE, RICHLAND, TREMPEALEAU, AND VERNON COUNTIES

AREA 4: MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES

AREA 5: DANE, GRANT, GREEN, IOWA, LAFAYETTE, AND ROCK

AREA 6: KENOSHA AND RACINE COUNTIES

TEAM0039-001 06/	ИΙ.	/ 2021
------------------	-----	--------

	Rates	Fringes
TRUCK DRIVER 1 & 2 Axles 3 or more Axles; Euclids, Dumptor & Articulated,	.\$ 32.57	23.81
Truck Mechanic	.\$ 32.72	23.81
WELL DRILLER	.\$ 16.52	3.70

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were

prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter

* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISIO"

NOTICE TO BIDDERS WAGE RATE DECISION

The wage rate decision of the Department of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Department of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate.

If a project includes multiple types of construction (highway, bridge over navigable water, sanitary sewer and water main, building) and there is not a separate wage determination for this type of work included in the proposal, use the wage determination that is in the proposal.

If a project includes multiple types of construction, different wage rate determinations may be inserted into the contract (WI10/Highway = in all WisDOT highway contracts, WI15/Heavy = bridge over navigable water per USDOL and US Coast Guard designation, WI8/Heavy (Sewer & Water Line & Tunnel) = sanitary sewer and water main if the cost is more than 20% of the contract and/or at least \$1,000,000, and Building). If multiple wage rate determinations are inserted into the contract, use the classification in the wage determination for the work being done. Use WI15 wage rates when working on the bridge and/or structure from bank to bank. Use WI8 wage rates when working on any sanitary sewer or water main work. Use Building wage rates for all work done within the footprint of the building. Use WI10 wage rates for all other highway work in the contract and approaches to structures. For example, if a laborer is working within the footprint of a building, use the Laborer rate in the Building wage determination inserted in the contract. If a laborer is working on a bridge/structure within the banks, use the Laborer rate in the WI15/Heavy wage determination if inserted in the contract. If the laborer is working on the highway, use the Laborer rate in the WI10/Highway wage determination.





Page 1 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	3.000 STA		
0004	201.0120 Clearing	408.000 ID		
0006	201.0205 Grubbing	3.000 STA		
8000	201.0220 Grubbing	408.000 ID		
0010	204.0100 Removing Concrete Pavement	20,085.000 SY	<u> </u>	
0012	204.0115 Removing Asphaltic Surface Butt Joints	14.000 SY		
0014	204.0120 Removing Asphaltic Surface Milling	1,235.000 SY		·
0016	204.0130 Removing Curb	68.000 LF		·
0018	204.0150 Removing Curb & Gutter	8,055.000 LF		·
0020	204.0155 Removing Concrete Sidewalk	8,095.000 SY		·
0022	204.0165 Removing Guardrail	45.000 LF		·
0024	204.0195 Removing Concrete Bases	35.000 EACH		·
0026	204.0210 Removing Manholes	23.000 EACH		
0028	204.0220 Removing Inlets	38.000 EACH		
0030	204.0245 Removing Storm Sewer (size) 01. 12-Inch or Less	1,063.000 LF	<u> </u>	
0032	204.0245 Removing Storm Sewer (size) 02. 15-Inch	2,193.000 LF	·	·





Page 2 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0034	204.0245 Removing Storm Sewer (size) 03. 18- Inch	592.000 LF	·	
0036	204.0245 Removing Storm Sewer (size) 04. 21-Inch	34.000 LF		<u></u>
0038	204.0245 Removing Storm Sewer (size) 05. 24-Inch	487.000 LF	·	
0040	204.0245 Removing Storm Sewer (size) 06. 30-Inch	56.000 LF	·	
0042	204.0245 Removing Storm Sewer (size) 07. 48-Inch	88.000 LF	·	·
0044	204.0245 Removing Storm Sewer (size) 08. 54-Inch	15.000 LF	·	
0046	204.0280 Sealing Pipes	12.000 EACH		·
0048	204.9060.S Removing (item description) 01. Vehicular Gate	1.000 EACH		
0050	204.9060.S Removing (item description) 02. Sidewalk Trench Drain	1.000 EACH	·	
0052	204.9090.S Removing (item description) 01. Stone Retaining Wall	150.000 LF		
0054	204.9090.S Removing (item description) 02. Metal Railing	30.000 LF	·	
0056	205.0100 Excavation Common	51,632.000 CY		
0058	206.1001 Excavation for Structures Bridges (structure) 01. B-13-864	1.000 EACH	·	·
0060	206.5001 Cofferdams (structure) 01. B-13-864	1.000 EACH		







Page 3 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line	Item ID	Approximate Quantity and	Unit Price	Bid Amount
Number	Description	Units		
0062	208.0100 Borrow	4,496.000 CY		
0064	210.1500 Backfill Structure Type A	200.000 TON	·	
0066	213.0100 Finishing Roadway (project) 01. 5992- 10-16	1.000 EACH		
0068	214.0100 Obliterating Old Road	4.000 STA		
0070	305.0110 Base Aggregate Dense 3/4-Inch	539.000 TON		
0072	305.0120 Base Aggregate Dense 1 1/4-Inch	38,372.000 TON	·	
0074	310.0115 Base Aggregate Open-Graded	137.000 CY	·	
0076	312.0110 Select Crushed Material	29,484.000 TON		
0078	405.1000 Stamping Colored Concrete	40.590 CY	·	
0080	415.0410 Concrete Pavement Approach Slab	142.000 SY	·	
0082	416.0170 Concrete Driveway 7-Inch	823.000 SY	·	
0084	416.0270 Concrete Driveway HES 7-Inch	98.000 SY	·	
0086	450.4000 HMA Cold Weather Paving	1,800.000 TON	·	
0088	455.0605 Tack Coat	1,348.000 GAL		
0090	460.2000 Incentive Density HMA Pavement	6,746.000 DOL	1.00000	6,746.00
0092	460.2007 Incentive Density HMA Pavement Longitudinal Joints	11,200.000 DOL	1.00000	11,200.00







Page 4 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0094	460.5223 HMA Pavement 3 LT 58-28 S	5,657.000 TON	·	
0096	460.5224 HMA Pavement 4 LT 58-28 S	3,344.000 TON		
0098	465.0120 Asphaltic Surface Driveways and Field Entrances	63.000 TON		
0100	465.0125 Asphaltic Surface Temporary	2,000.000 TON		
0102	502.0100 Concrete Masonry Bridges	69.000 CY		·
0104	502.3101 Expansion Device	32.600 LF		
0106	502.3200 Protective Surface Treatment	236.000 SY		
0108	502.4204 Adhesive Anchors No. 4 Bar	64.000 EACH		
0110	504.2000.S Precast Concrete Box Culvert (ft X ft) 01. 3 FT x 6 FT	1,455.000 LF	·	
0112	505.0400 Bar Steel Reinforcement HS Structures	4,730.000 LB		·
0114	505.0600 Bar Steel Reinforcement HS Coated Structures	2,920.000 LB		
0116	506.8006.S Prefabricated Steel Truss Pedestrian Bridge LRFD (structure) 01. B-13-864	1.000 EACH		
0118	509.0301 Preparation Decks Type 1	12.000 SY		
0120	509.0302 Preparation Decks Type 2	6.000 SY		
0122	509.0310.S Sawing Pavement Deck Preparation Areas	112.000 LF		





Page 5 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0124	509.0500 Cleaning Decks	16.000 SY		
0126	509.2000 Full-Depth Deck Repair	1.000 SY		
0128	509.2100.S Concrete Masonry Deck Repair	3.000 CY		
0130	509.5100.S Polymer Overlay	230.000 SY		
0132	509.9015.S Removing Polymer Overlay (structure) 01. B-13-254	246.000 SY		
0134	511.1200 Temporary Shoring (structure) 01. R-13- 336	1,100.000 SF	·	
0136	512.1000 Piling Steel Sheet Temporary	560.000 SF		
0138	516.0500 Rubberized Membrane Waterproofing	14.000 SY	<u> </u>	<u> </u>
0140	517.1010.S Concrete Staining (structure) 01. R-13- 336	770.000 SF		
0142	520.8000 Concrete Collars for Pipe	2.000 EACH		
0144	522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	2.000 EACH	·	
0146	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	2.000 EACH	·	
0148	522.1048 Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	1.000 EACH	·	·
0150	522.1066 Apron Endwalls for Culvert Pipe Reinforced Concrete 66-Inch	1.000 EACH	·	·
0152	550.2106 Piling CIP Concrete 10 3/4 X 0.365-Inch	540.000 LF	·	





Page 6 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0154	601.0407 Concrete Curb & Gutter 18-Inch Type D	128.000 LF		
0156	601.0600 Concrete Curb Pedestrian	406.000 LF		
0158	602.0410 Concrete Sidewalk 5-Inch	38,420.000 SF		
0160	602.0420 Concrete Sidewalk 7-Inch	8,005.000 SF		·
0162	602.0515 Curb Ramp Detectable Warning Field Natural Patina	572.000 SF		·
0164	602.0615 Curb Ramp Detectable Warning Field Radial Natural Patina	427.650 SF	·	
0166	602.1500 Concrete Steps	35.000 SF		·
0168	603.8000 Concrete Barrier Temporary Precast Delivered	2,500.000 LF		
0170	603.8125 Concrete Barrier Temporary Precast Installed	2,500.000 LF	<u> </u>	<u> </u>
0172	606.0200 Riprap Medium	3.110 CY		·
0174	606.0300 Riprap Heavy	44.000 CY		·
0176	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	893.000 LF		
0178	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	324.000 LF		
0180	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	32.000 LF		
0182	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	1,351.000 LF		





Page 7 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0184	608.0348 Storm Sewer Pipe Reinforced Concrete Class III 48-Inch	158.000 LF		
0186	608.0360 Storm Sewer Pipe Reinforced Concrete Class III 60-Inch	56.000 LF		
0188	608.0366 Storm Sewer Pipe Reinforced Concrete Class III 66-Inch	655.000 LF		
0190	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	691.000 LF		·
0192	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	108.000 LF		
0194	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	680.000 LF		
0196	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	451.000 LF	·	
0198	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	451.000 LF	·	
0200	608.6012 Storm Sewer Pipe Composite 12-Inch	11.000 LF		
0202	611.0535 Manhole Covers Type J-Special	50.000 EACH		
0204	611.0624 Inlet Covers Type H	91.000 EACH		·
0206	611.0645 Inlet Covers Type MS-A	2.000 EACH		
0208	611.2033 Manholes 3x3-FT	11.000 EACH	·	
0210	611.2044 Manholes 4x4-FT	12.000 EACH		
0212	611.2055 Manholes 5x5-FT	3.000 EACH		







Page 8 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0214	611.2066 Manholes 6x6-FT	1.000 EACH		
0216	611.3230 Inlets 2x3-FT	84.000 EACH		
0218	611.3901 Inlets Median 1 Grate	2.000 EACH		
0220	611.8110 Adjusting Manhole Covers	7.000 EACH		
0222	611.8115 Adjusting Inlet Covers	1.000 EACH		
0224	611.8120.S Cover Plates Temporary	45.000 EACH		
0226	611.9800.S Pipe Grates	5.000 EACH		
0228	612.0106 Pipe Underdrain 6-Inch	3,425.000 LF		
0230	612.0406 Pipe Underdrain Wrapped 6-Inch	270.000 LF		
0232	612.0902.S Insulation Board Polystyrene (inch) 01. 2-Inch	916.560 SY		
0234	614.0905 Crash Cushions Temporary	5.000 EACH		
0236	616.0700.S Fence Safety	700.000 LF		
0238	618.0100 Maintenance And Repair of Haul Roads (project) 01. 5992-10-16	1.000 EACH		
0240	619.1000 Mobilization	1.000 EACH		
0242	620.0300 Concrete Median Sloped Nose	525.000 SF		
0244	624.0100 Water	445.000 MGAL		





Page 9 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0246	625.0100 Topsoil	20,760.000 SY		
0248	628.1504 Silt Fence	2,000.000 LF		
0250	628.1520 Silt Fence Maintenance	2,000.000 LF		
0252	628.1905 Mobilizations Erosion Control	12.000 EACH		
0254	628.1910 Mobilizations Emergency Erosion Control	6.000 EACH		
0256	628.2008 Erosion Mat Urban Class I Type B	20,760.000 SY		
0258	628.6005 Turbidity Barriers	300.000 SY		
0260	628.7005 Inlet Protection Type A	5.000 EACH		·
0262	628.7020 Inlet Protection Type D	153.000 EACH		
0264	628.7555 Culvert Pipe Checks	3.000 EACH		
0266	628.7560 Tracking Pads	4.000 EACH		
0268	628.7570 Rock Bags	20.000 EACH		
0270	629.0210 Fertilizer Type B	14.100 CWT		
0272	630.0140 Seeding Mixture No. 40	378.000 LB		<u></u>
0274	630.0500 Seed Water	1,239.000 MGAL		
0276	637.2210 Signs Type II Reflective H	197.950 SF		
0278	637.2230 Signs Type II Reflective F	46.750 SF		





Page 10 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0280	638.2102 Moving Signs Type II	43.000 EACH		<u> </u>
0282	638.2602 Removing Signs Type II	85.000 EACH		
0284	638.3000 Removing Small Sign Supports	66.000 EACH		
0286	638.4000 Moving Small Sign Supports	6.000 EACH	<u> </u>	
0288	642.5401 Field Office Type D	1.000 EACH	·	<u> </u>
0290	643.0300 Traffic Control Drums	45,000.000 DAY		
0292	643.0410 Traffic Control Barricades Type II	8,500.000 DAY		
0294	643.0420 Traffic Control Barricades Type III	11,944.000 DAY		
0296	643.0500 Traffic Control Flexible Tubular Marker Posts	700.000 EACH		·
0298	643.0600 Traffic Control Flexible Tubular Marker Bases	700.000 EACH	·	
0300	643.0705 Traffic Control Warning Lights Type A	25,888.000 DAY		
0302	643.0715 Traffic Control Warning Lights Type C	5,500.000 DAY		
0304	643.0800 Traffic Control Arrow Boards	300.000 DAY		
0306	643.0900 Traffic Control Signs	45,516.000 DAY		
0308	643.0920 Traffic Control Covering Signs Type II	10.000 EACH		
0310	643.1000 Traffic Control Signs Fixed Message	321.640 SF	·	·







Page 11 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

	Description	Approximate Quantity and Units	Unit Price	Bid Amount
	343.1050 Traffic Control Signs PCMS	100.000 DAY		
	343.3105 Temporary Marking Line Paint 4-Inch	42,500.000 LF		
To	343.3150 Temporary Marking Line Removable Tape 4-Inch	13,000.000 LF	·	·
	343.3205 Temporary Marking Line Paint 8-Inch	100.000 LF		
To	343.3250 Temporary Marking Line Removable Tape 8-Inch	60.000 LF	·	·
	343.3505 Temporary Marking Arrow Paint	2.000 EACH		
To	643.3550 ⁻ emporary Marking Arrow Removable ⁻ ape	2.000 EACH	·	<u></u>
T	643.3805 Temporary Marking Stop Line Paint 18- nch	150.000 LF	·	
To	643.3850 Temporary Marking Stop Line Removable Tape 18-Inch	100.000 LF	·	<u></u>
Te	643.3970 Temporary Marking Removable Mask Dut Tape 10-Inch	100.000 LF	·	
	343.5000 Traffic Control	1.000 EACH		
	344.1410 Temporary Pedestrian Surface Asphalt	52,300.000 SF		
	644.1430 Temporary Pedestrian Surface Plate	2,300.000 SF		
	344.1440 Temporary Pedestrian Surface Matting	4,000.000 SF	·	
	344.1601 Temporary Pedestrian Curb Ramp	4,350.000 DAY		







Page 12 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line	Item ID	Approximate Quantity and	Unit Price	Bid Amount
Number	Description	Units		
0342	644.1605 Temporary Pedestrian Detectable Warning Field	1,200.000 SF		·
0344	644.1810 Temporary Pedestrian Barricade	23,300.000 LF		
0346	645.0111 Geotextile Type DF Schedule A	1,941.000 SY		·
0348	645.0120 Geotextile Type HR	238.000 SY		
0350	646.1020 Marking Line Epoxy 4-Inch	14,425.000 LF		
0352	646.3020 Marking Line Epoxy 8-Inch	1,350.000 LF		·
0354	646.5020 Marking Arrow Epoxy	63.000 EACH	·	·
0356	646.5120 Marking Word Epoxy	6.000 EACH	·	·
0358	646.5220 Marking Symbol Epoxy	62.000 EACH		·
0360	646.7120 Marking Diagonal Epoxy 12-Inch	175.000 LF		
0362	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	858.000 LF		·
0364	646.8120 Marking Curb Epoxy	110.000 LF		
0366	646.8220 Marking Island Nose Epoxy	13.000 EACH	·	
0368	646.8320 Marking Parking Stall Epoxy	450.000 LF		
0370	646.9000 Marking Removal Line 4-Inch	1,500.000 LF		
0372	646.9200 Marking Removal Line Wide	600.000 LF		







Page 13 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0374	646.9300 Marking Removal Special Marking	4.000 EACH		
0376	650.4000 Construction Staking Storm Sewer	136.000 EACH	·	·
0378	650.4500 Construction Staking Subgrade	13,168.000 LF	·	
0380	650.5000 Construction Staking Base	13,168.000 LF		
0382	650.5500 Construction Staking Curb Gutter and Curb & Gutter	16,584.000 LF		·
0384	650.6501 Construction Staking Structure Layout (structure) 01. R-13-336	1.000 EACH	·	
0386	650.6501 Construction Staking Structure Layout (structure) 02. B-13-864	1.000 EACH	·	
0388	650.6501 Construction Staking Structure Layout (structure) 03. B-13-254	1.000 EACH	·	
0390	650.8000 Construction Staking Resurfacing Reference	216.000 LF	·	
0392	650.8501 Construction Staking Electrical Installations (project) 01. 5992-10-16	1.000 EACH	·	·
0394	650.9000 Construction Staking Curb Ramps	58.000 EACH		
0396	650.9500 Construction Staking Sidewalk (project) 01. 5992-10-16	1.000 EACH		
0398	650.9911 Construction Staking Supplemental Control (project) 01. 5992-10-16	1.000 EACH		·
0400	650.9920 Construction Staking Slope Stakes	7,807.000 LF		







Page 14 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0402	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	8,038.000 LF		<u> </u>
0404	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	6,600.000 LF		
0406	652.0325 Conduit Rigid Nonmetallic Schedule 80 2-Inch	1,307.000 LF		·
0408	652.0335 Conduit Rigid Nonmetallic Schedule 80 3-Inch	1,437.000 LF		·
0410	652.0605 Conduit Special 2-Inch	55.000 LF		·
0412	652.0615 Conduit Special 3-Inch	55.000 LF		
0414	652.0700.S Install Conduit into Existing Item	2.000 EACH		
0416	653.0905 Removing Pull Boxes	17.000 EACH		
0418	654.0110 Concrete Bases Type 10	1.000 EACH		
0420	655.0230 Cable Traffic Signal 5-14 AWG	1,349.000 LF		
0422	655.0240 Cable Traffic Signal 7-14 AWG	1,450.000 LF		
0424	655.0250 Cable Traffic Signal 9-14 AWG	480.000 LF		·
0426	655.0615 Electrical Wire Lighting 10 AWG	5,594.000 LF		·
0428	655.0620 Electrical Wire Lighting 8 AWG	8,245.000 LF		·
0430	655.0630 Electrical Wire Lighting 4 AWG	24,345.000 LF		
0432	655.0800 Loop Detector Wire	1,751.000 LF	<u></u>	







Page 15 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0434	656.0201 Electrical Service Meter Breaker Pedestal (location) 01. Sta 46+84.5, 47.5' RT	1.000 EACH	·	
0436	656.0201 Electrical Service Meter Breaker Pedestal (location) 02. Sta 27+98.0, 51.0' RT	1.000 EACH		
0438	656.0201 Electrical Service Meter Breaker Pedestal (location) 03. Sta 46+90.0, 47.5' RT	1.000 EACH		·
0440	657.0405 Traffic Signal Standards Aluminum 3.5- FT	2.000 EACH	·	·
0442	657.0415 Traffic Signal Standards Aluminum 11-FT	4.000 EACH		
0444	657.0420 Traffic Signal Standards Aluminum 13-FT	3.000 EACH		
0446	658.0500 Pedestrian Push Buttons	11.000 EACH		
0448	658.5070 Signal Mounting Hardware (location) 01. Atwood Avenue & Walter Street	1.000 EACH		·
0450	658.5070 Signal Mounting Hardware (location) 02. Atwood Avenue & Cottage Grove Road	1.000 EACH		
0452	678.0200 Fiber Optic Splice Enclosure	2.000 EACH		
0454	678.0300 Fiber Optic Splice	576.000 EACH		
0456	678.0400 Fiber Optic Termination	42.000 EACH		
0458	690.0150 Sawing Asphalt	7,496.000 LF		
0460	690.0250 Sawing Concrete	5,247.500 LF		





Page 16 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0462	715.0502 Incentive Strength Concrete Structures	500.000 DOL	1.00000	500.00
0464	715.0720 Incentive Compressive Strength Concrete Pavement	500.000 DOL	1.00000	500.00
0466	740.0440 Incentive IRI Ride	6,550.000 DOL	1.00000	6,550.00
0468	999.1501.S Crack and Damage Survey	1.000 EACH		
0470	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	2,100.000 HRS	5.00000	10,500.00
0472	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	1,500.000 HRS	5.00000	7,500.00
0474	SPV.0035 Special 01. Abandon Sanitary Sewer- Slurry	28.490 CY	·	
0476	SPV.0060 Special 01. Root Pruning Trees	30.000 EACH		
0478	SPV.0060 Special 02. Pruning Tree	3.000 EACH		
0480	SPV.0060 Special 03. Grubbing Special 72-Inch	1.000 EACH		
0482	SPV.0060 Special 04. Remove, Salvage, and Reinstall Bicycle Rack	1.000 EACH		:
0484	SPV.0060 Special 05. Precast Sign Post Base	57.000 EACH		
0486	SPV.0060 Special 06. Sign Post Base for Concrete Installation	3.000 EACH		
0488	SPV.0060 Special 07. Manholes 8x8-FT Special	15.000 EACH		
0490	SPV.0060 Special 08. Sidewalk Trench Drain	1.000 EACH		







Page 17 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0492	SPV.0060 Special 09. Concrete Pipe Support	6.000 EACH		
0494	SPV.0060 Special 10. Reconstruct Bench and Flowlines, Storm Sewer	1.000 EACH	·	<u> </u>
0496	SPV.0060 Special 11. Utility Line Opening (ULO)	41.000 EACH		
0498	SPV.0060 Special 12. Locate and Reference Property Corners	20.000 EACH	·	
0500	SPV.0060 Special 13. Reset Property Corners	20.000 EACH		
0502	SPV.0060 Special 14. Street Light Removal	28.000 EACH	·	
0504	SPV.0060 Special 15. Traffic Signal Removal	3.000 EACH	·	
0506	SPV.0060 Special 16. Lighting Control Cabinet	2.000 EACH		·
0508	SPV.0060 Special 17. LED Luminaire and Mounting Bracket Type 1	8.000 EACH	·	
0510	SPV.0060 Special 18. LED Luminaire and Mounting Bracket Type 2	5.000 EACH	·	
0512	SPV.0060 Special 19. LED Luminaire and Mounting Bracket Type 3	4.000 EACH	·	
0514	SPV.0060 Special 20. LED Luminaire and Mounting Bracket Type 4	5.000 EACH		
0516	SPV.0060 Special 21. LED Luminaire and Mounting Bracket Type 5	45.000 EACH	·	·
0518	SPV.0060 Special 22. Pole Aluminum 20-Foot Street Light, Black	5.000 EACH		
0520	SPV.0060 Special 23. Pole 30-Foot, 11 Gauge	42.000 EACH		







Page 18 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0522	SPV.0060 Special 24. Pole 30-Foot, 7 Gauge	6.000 EACH		
0524	SPV.0060 Special 25. Pole 20-Foot, 7 Gauge	4.000 EACH		·
0526	SPV.0060 Special 26. Electrical Pullbox, Type I	36.000 EACH		
0528	SPV.0060 Special 27. Electrical Pullbox, Type III	3.000 EACH		
0530	SPV.0060 Special 28. Electrical Pullbox, Type V	18.000 EACH		
0532	SPV.0060 Special 29. Electrical Pullbox, Type VII	3.000 EACH		
0534	SPV.0060 Special 30. Concrete Base Type G	9.000 EACH		
0536	SPV.0060 Special 31. Concrete Base Type LB-2	5.000 EACH		
0538	SPV.0060 Special 32. Concrete Base Type LB-3	44.000 EACH		
0540	SPV.0060 Special 33. Concrete Base Type LB-8	11.000 EACH		
0542	SPV.0060 Special 34. Concrete Base Type P	2.000 EACH		
0544	SPV.0060 Special 35. Concrete Base Type M	1.000 EACH		
0546	SPV.0060 Special 36. Concrete Base Offset	4.000 EACH		
0548	SPV.0060 Special 37. Transformer Base 16-Inch Steel	4.000 EACH		
0550	SPV.0060 Special 38. Inlet Covers Flat Temporary	10.000 EACH		
0552	SPV.0060 Special 40. NEMA TS2 Type 1 Traffic Signal Control Cabinet	1.000 EACH		







Page 19 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0554	SPV.0060 Special 41. Traffic Signal Ethernet Switch	1.000 EACH		
0556	SPV.0060 Special 42. Pedestal Base, Black	9.000 EACH		
0558	SPV.0060 Special 43. Traffic Signal Trombone Arms Aluminum 12-Foot	2.000 EACH		
0560	SPV.0060 Special 44. Traffic Signal Trombone Arms Aluminum 18-Foot	3.000 EACH		
0562	SPV.0060 Special 45. Traffic Signal Trombone Arms Aluminum 22-Foot	1.000 EACH		
0564	SPV.0060 Special 46. Traffic Signal Heads 12-Inch, 3-Section	13.000 EACH	·	
0566	SPV.0060 Special 47. Traffic Signal Heads 12-Inch, 4-Section	4.000 EACH		
0568	SPV.0060 Special 48. Traffic Signal Heads 12-Inch, 5-Section	2.000 EACH		
0570	SPV.0060 Special 49. Traffic Signal Heads 16-Inch Pedestrian With Countdown	9.000 EACH		
0572	SPV.0060 Special 50. Backplates Signal Face, 3- Section 12-Inch	13.000 EACH		·
0574	SPV.0060 Special 51. Backplates Signal Face, 4- Section 12-Inch	4.000 EACH	·	
0576	SPV.0060 Special 52. Backplates Signal Face, 5- Section, 12-Inch	2.000 EACH		
0578	SPV.0060 Special 56. Remove Base Type 10	1.000 EACH		
0580	SPV.0060 Special 57. Remove Sanitary Sewer Access Structure	13.000 EACH		







Page 20 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0582	SPV.0060 Special 58. Abandon Sanitary Sewer Access Structure	2.000 EACH		·
0584	SPV.0060 Special 59. Sanitary Sewer Access Structure, 4-Foot Diameter	11.000 EACH		
0586	SPV.0060 Special 60. Sanitary Sewer Access Structure, 5-Foot Diameter	4.000 EACH	·	
0588	SPV.0060 Special 61. Sanitary Sewer Tap	12.000 EACH		
0590	SPV.0060 Special 62. Sewer Electronic Markers	121.000 EACH	<u> </u>	<u></u>
0592	SPV.0060 Special 63. Sanitary Sewer Internal Chimney Seal	2.000 EACH	·	
0594	SPV.0060 Special 64. External Sewer Access Structure Joint Seal	4.000 EACH	·	·
0596	SPV.0060 Special 65. Sanitary Lateral Reconnect	57.000 EACH		
0598	SPV.0060 Special 66. Adjusting Sanitary Sewer Manhole, Monona	3.000 EACH	·	
0600	SPV.0060 Special 67. Abandon Sanitary Sewer - Pipe Plug	5.000 EACH		·
0602	SPV.0060 Special 68. Reconstruct Bench and Flowlines, Sanitary Sewer	2.000 EACH		·
0604	SPV.0060 Special 69. Install Compression Coupling	3.000 EACH		
0606	SPV.0060 Special 70. Cut Off Existing Water Main	8.000 EACH		
0608	SPV.0060 Special 71. Cut-In or Connect-To Existing Water System	23.000 EACH	·	·







Page 21 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0610	SPV.0060 Special 72. Abandon Water Valve Box	6.000 EACH		·
0612	SPV.0060 Special 73. Abandon Water Valve Access Structure	9.000 EACH	·	
0614	SPV.0060 Special 74. Remove and Salvage Existing Hydrant	3.000 EACH	·	·
0616	SPV.0060 Special 75. Adjust Water Valve Box Section	23.000 EACH	·	
0618	SPV.0060 Special 76. Furnish & Install 6-Inch Valve	5.000 EACH		
0620	SPV.0060 Special 77. Furnish & Install 8-Inch Valve	4.000 EACH		
0622	SPV.0060 Special 78. Furnish & Install 10-Inch Valve	7.000 EACH		
0624	SPV.0060 Special 79. Furnish and Install Hydrant	3.000 EACH		
0626	SPV.0060 Special 80. Relocate Water Service	19.000 EACH		
0628	SPV.0060 Special 81. Remove and Salvage Drinking Fountain	1.000 EACH		·
0630	SPV.0060 Special 82. Drinking Fountain	1.000 EACH		
0632	SPV.0060 Special 83. Remove, Salvage, and Reinstall Boulder Retaining Wall	1.000 EACH	·	
0634	SPV.0060 Special 84. Adjust Curb Box	24.000 EACH		
0636	SPV.0060 Special 85. Relocate Hydrant	1.000 EACH		
0638	SPV.0060 Special 86. Inlet Covers Madison Special	2.000 EACH		





Page 22 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0640	SPV.0060 Special 87. Temporary Lighting	1.000 EACH		
0642	SPV.0060 Special 88. Optical Signal Preempt	1.000 EACH		
0644	SPV.0060 Special 89. Temporary Traffic Signals Atwood Avenue - Walter Street	1.000 EACH		
0646	SPV.0060 Special 90. Temporary Traffic Signals Atwood Avenue - Cottage Grove Road	1.000 EACH		·
0648	SPV.0060 Special 91. Wastewater Control 150 GPM	1.000 EACH	.	·
0650	SPV.0060 Special 92. Remove, Salvage, and Reinstall Riprap Heavy	1.000 EACH		·
0652	SPV.0060 Special 93. Construction Staking Sanitary Sewer	1.000 EACH		·
0654	SPV.0060 Special 94. Construction Staking Water Main	1.000 EACH		·
0656	SPV.0060 Special 95. Temporary Overhead Fiber Optic	1.000 EACH		·
0658	SPV.0085 Special 01. Shortgrass Prairie Seed Mix	3.300 LB		•
0660	SPV.0090 Special 01. Railing Pedestrian Steel B- 13-864	48.000 LF	·	·
0662	SPV.0090 Special 02. Concrete Curb & Gutter 24- Inch Type D Special	14,184.000 LF		
0664	SPV.0090 Special 03. Concrete Curb & Gutter 30- Inch Type D Special	1,136.000 LF		
0666	SPV.0090 Special 04. Concrete Curb & Gutter 24- Inch Type D Special HF	445.000 LF		





Page 23 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0668	SPV.0090 Special 05. Concrete Curb & Gutter 30- Inch Type D Special HF	25.000 LF		
0670	SPV.0090 Special 06. Concrete Curb & Gutter 24- Inch Type X Special	56.000 LF	·	
0672	SPV.0090 Special 07. Concrete Curb & Gutter 24- Inch Type A Special	144.000 LF	·	
0674	SPV.0090 Special 08. Concrete Curb & Gutter 30- Inch Type A Special	30.000 LF	·	
0676	SPV.0090 Special 09. Concrete Curb & Gutter Type Special Parking Lot	5.000 LF		·
0678	SPV.0090 Special 10. Concrete Gutter 24-Inch Type D Special	25.000 LF		·
0680	SPV.0090 Special 12. Reflective Sign Post	613.000 LF	·	·
0682	SPV.0090 Special 13. Marking Line Epoxy 6-Inch	3,205.000 LF		
0684	SPV.0090 Special 14. Marking Crosswalk Epoxy Ladder Pattern 18-Inch	898.000 LF	·	
0686	SPV.0090 Special 15. Marking Stop Line Epoxy 24- Inch	333.000 LF	·	·
0688	SPV.0090 Special 16. Electrical Wire Lighting, 14-3 Grounded	2,885.000 LF		·
0690	SPV.0090 Special 17. Loop Detector Lead-In Cable Special	6,224.000 LF	<u> </u>	
0692	SPV.0090 Special 18. Fiber Optic Cable 24-Count	1,320.000 LF		
0694	SPV.0090 Special 19. Fiber Optic Cable 144-Count	6,959.000 LF		





Page 24 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0696	SPV.0090 Special 20. Staking Temporary Pavement	4,000.000 LF		
0698	SPV.0090 Special 21. Sanitary Sewer Pipe PVC, 8-Inch	2,484.000 LF		
0700	SPV.0090 Special 22. Sanitary Sewer Lateral	1,391.000 LF		
0702	SPV.0090 Special 23. Remove Sanitary Sewer Pipe	216.000 LF		
0704	SPV.0090 Special 24. Select Fill for Sanitary Sewer	3,875.000 LF		
0706	SPV.0090 Special 25. Utility Trench Patch Type III	52.000 LF	·	
0708	SPV.0090 Special 26. Sanitary Sewer Lining	705.000 LF		
0710	SPV.0090 Special 27. Furnish & Install 6-Inch Pipe & Fittings	124.000 LF	·	
0712	SPV.0090 Special 28. Furnish & Install 8-Inch Pipe & Fittings	252.000 LF		·
0714	SPV.0090 Special 29. Furnish & Install 10-Inch Pipe & Fittings	377.000 LF		
0716	SPV.0090 Special 30. Furnish & Install 12-Inch Pipe & Fittings	50.000 LF		
0718	SPV.0090 Special 31. Sawed in Bicycle Loop Detection	1,488.000 LF	·	<u> </u>
0720	SPV.0090 Special 32. Thermoplastic Retroreflective Pavement Marking, 4-Inch	160.000 LF	·	
0722	SPV.0090 Special 33. Thermoplastic Retroreflective Pavement Marking, 6-Inch	662.000 LF		



Page 25 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, 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
0724	SPV.0165 Special 01. Wall Modular Block Gravity R-13-336	770.000 SF		·
0726	SPV.0165 Special 02. Cut-Stone Boulders	476.000 SF		
0728	SPV.0165 Special 03. High Friction Colored Surface, Green	5,670.000 SF	·	<u></u>
0730	SPV.0170 Special 01. Pavement Cleanup	79.000 STA		
0732	SPV.0180 Special 01. Raised Concrete Crosswalk	176.000 SY		
0734	SPV.0180 Special 02. Shredded Hardwood Bark Mulch	915.000 SY	·	
0736	SPV.0180 Special 03. Planting Mix Topsoil	915.000 SY		
0738	SPV.0200 Special 01. Construct Inside Drop, 6-Inch	5.520 VF		
0740	SPV.0200 Special 02. Construct Inside Drop, 8-Inch	13.490 VF	·	

Section: 0001

Total Bid:

Total:

PLEASE ATTACH ADDENDA HERE



Wisconsin Department of Transportation

December 6, 2022

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

5992-10-17, WISC 2023 094

Road

Non Hwy

Dane County

C of Madison, Atwood Avenue

Fair Oaks Avenue - Cottage Grove

NOTICE TO ALL CONTRACTORS:

Proposal #13: 5992-10-16, WISC 2023 094

C of Madison, Atwood Avenue Fair Oaks Avenue – Cottage Grove

Road

Local Street Dane County

5992-10-18

C of Madison, Atwood Avenue Fair Oaks Avenue – Cottage Grove

Road

Local Street Dane County

Letting of December 13, 2022

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

Special Provisions:

	Revised Special Provisions
Article No.	Description
4	Traffic

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 5992-10-16/17/18 December 6, 2022

Special Provisions

4. Traffic.

Replace entire section titled General Traffic Operations During All Stages with the following:

General Traffic Operations During All Stages

Maintain existing traffic operations to the extent possible during Stages 1 and 2 with the exceptions as shown on the plans.

Maintain a minimum of one lane of traffic in each direction at all times on Atwood Avenue between Walter Street and Cottage Grove Road except for closures and detours defined in this article.

Maintain a minimum of one single lane of eastbound traffic at all times on Atwood Avenue between Fair Oaks Avenue and Ludington Avenue during Stage 3 for bus access only.

Maintain a minimum lane width of 10 feet at all times during construction and provide wider lane widths when shown in the plans.

END OF ADDENDUM



Wisconsin Department of Transportation

December 9, 2022

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:

Proposal #13: 5992-10-16, WISC 2023 094 5992-10-17, WISC 2023 094

C of Madison, Atwood Avenue
Fair Oaks Avenue – Cottage
Fair Oaks Avenue – Cottage

Grove Road
Local Street
Dane County

Grove Road
Local Street
Dane County

5992-10-18

C of Madison, Atwood Avenue Fair Oaks Avenue – Cottage

Grove Road Local Street Dane County

Letting of December 13, 2022

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

Special Provisions:

	Added Special Provisions
Article No.	Description
149	Remove, Salvage, and Reinstall Electrical Service Meter Breaker Pedestal, Item SPV.0060.96

Schedule of Items:

	Revised Bid Item	Quantitie	S		
			Proposal	Proposal	Proposal
Bid Item	Itom Description	Unit	Total Prior	Quantity	Total After
Did itelli	Item Description	Offic	to	Change (-)	Addendum
			Addendum	• , ,	
204.0210	Removing Manholes	Each	23	9	32

	Added Bid Item (Quantities			
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Quantity Added	Proposal Total After Addendum
SPV.0060.96	Remove, Salvage, and Reinstall Electrical Service Meter Breaker Pedestal (Location)	Each	0	2	2

Plan Sheets:

	Revised Plan Sheets
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
385, 387-389, 392,	Plan and Profile – Added additional AT&T manholes to be removed by the
394, 398-399	contractor.
332 - 333	Miscellaneous Quantities – Added Table for Removing AT&T Manholes. Added *
332 - 333	for additional quantities found elsewhere on original table.
357	Miscellaneous Quantities – Added Table for Remove, Salvage, and Reinstall
337	Electrical Service Meter Breaker Pedestal
178 & 181	Lighting Plans – Added Remove, Salvage, and Reinstall Electrical Service Meter
170 & 101	Breaker Pedestal to the plans

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Mike Coleman

Proposal Development Specialist Proposal Management Section

ADDENDUM NO. 02 5992-10-16/17/18 December 9, 2022

5000111501 0, 20

Special Provisions

149. Remove, Salvage, and Reinstall Electrical Service Meter Breaker Pedestal, Item SPV.0060.96.

A Description

This item describes the removal, salvaging, and delivery to the City of Madison of existing electric service meter pedestals serviced by Madison Gas and Electric.

B (Vacant)

C Construction

Notify the City of Madison traffic engineering inspector Troy Vant (608) 395-1975 to inspect meter pedestals prior to removing and salvaging at least 48-hours prior to removal. City of Madison will determine if the meter pedestal can be salvaged based on Madison Gas and Electric recommendations as follows:

- Meter pedestal must meet current MGE standards, being a heavy duty, ringless, commercial type socket with a jaw-releasing lever bypass.
- Meter pedestal must not show signs of damage, corroded connections, broken seals, or have missing parts.

Once the meter pedestal has been approved for salvage, carefully remove the meter pedestal in a way as to not damage or change the conditions of the above mentioned checklist. The contractor shall be responsible for storing and protecting the meter pedestal to maintain it's acceptable condition until the time of re-installation.

If Bid Item 656.0201 is not available for installation within the desired project timeline, coordinate with the City of Madison traffic engineering inspector for reinstallation in the new cabinets as shown on the plans in accordance with standard spec 656.

Contact City of Madison Building Inspection at, (608) 266-6503 a minimum of two working days in advance to coordinate inspection of each Electrical Service Meter Breaker Pedestal.

D Measurement

The department payment will be measured by each salvaged meter pedestal inspected, removed, delivered, reinstalled, and accepted by the City of Madison. If a meter pedestal is determined to not be salvageable, or if the contractor damages the meter pedestal during the removal or delivery process, payment on each damaged meter pedestal shall not be made.

E Payment

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

ITEM NUMBER DESCRIPTION UNIT SPV.0060.96 Remove, Salvage, and Reinstall Electrical Service Meter EACH Breaker Pedestal

Payment is full compensation for furnishing and installing all materials, and for furnishing all equipment and incidentals necessary to complete the work.

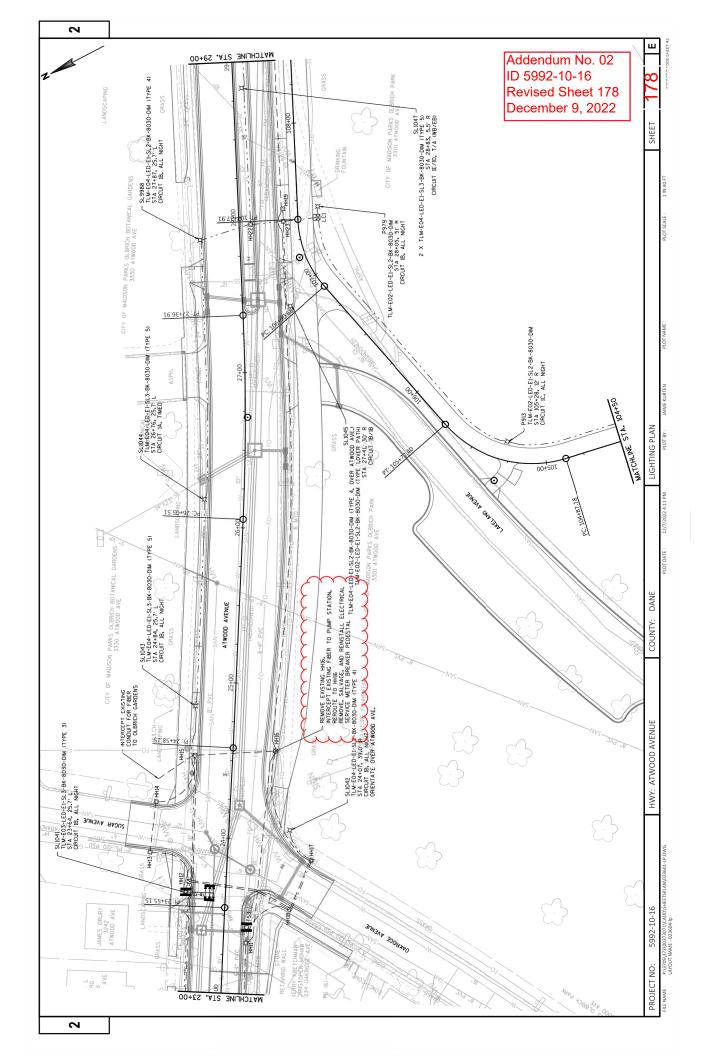
Schedule of Items

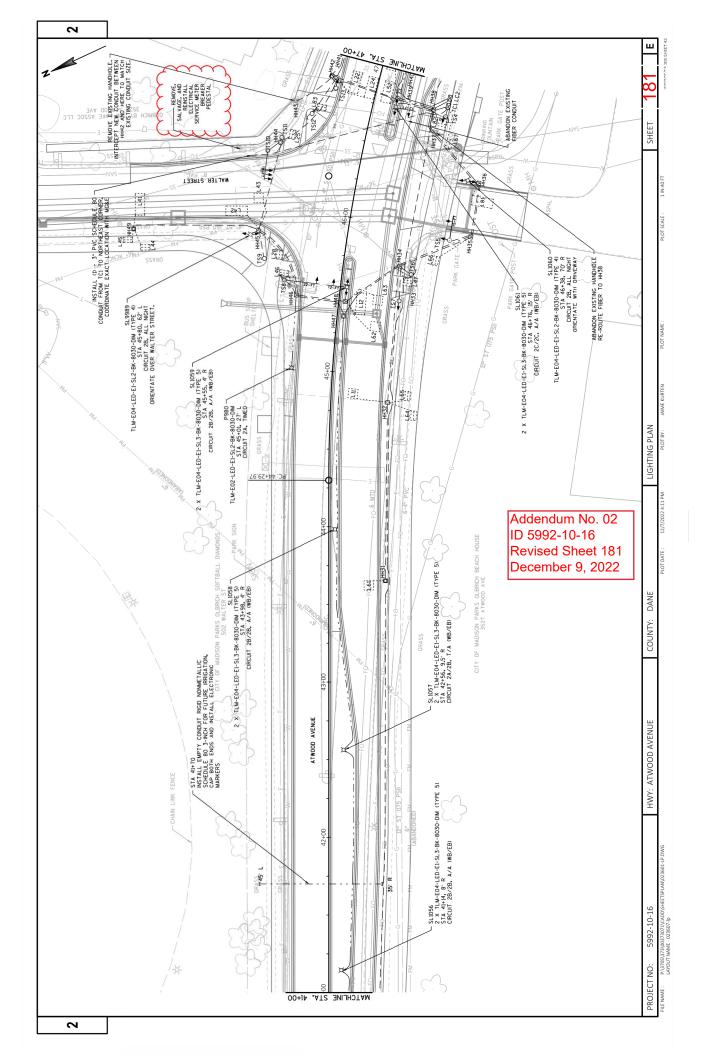
Attached, dated December 9, 2022, are the revised Schedule of Items Pages 1 and 25.

Plan Sheets

The following $8\frac{1}{2}$ x 11-inch sheets are attached and made part of the plans for this proposal: Revised: 178, 181, 320, 326, 332, 333, 357, 385, 387, 388, 389, 392, 394, 398, 399

END OF ADDENDUM





Addendum No. ID 5992-10-16 Revised Sheet 3 Common	STRUCTURE LD. 47 FT N 6042-008 35 FT C8 6042-062 24 LT AS 6042-006 13 FT N 6042-016 19 LT N 6042-016 19 LT N 6042-016 57 FT N 6042-016 21'LT AS 6042-016 21'LT AS 6042-016 21'LT AS 6042-016 17 FT N 6042-016	OVING REMOVING					SIZE 01.	SIZE 02.	REMOVING STORM SEWER 02. SIZE 03.		SIZE 05.	SIZE 06.	SIZE 07.	SIZE 08.
Addendum No. ID 5992-10-16 Revised Sheet December 9, 20 103910-10-16 Revised Sheet December 9, 20 103910-16-16 Revised Sheet December 9, 20 103910-16-16 Revised Sheet December 9, 20 103910-16-16-16 Revised Sheet December 9, 20 103910-16-16-16-16 Revised Sheet December 9, 20 103910-16-16-16-16 Revised Sheet December 9, 20 103910-16-16-16-16-16-16-16-16-16-16-16-16-16-	47 RT N 6042-008 88 RT G8 6042-008 24 LT AS 6042-006 13 RT N 6042-007 19 LT N 6042-013 16 LT N 6042-013 17 RT N 6042-014 21 LT AS 6042-014 43 RT N 6042-014 43 RT N 6042-014 43 RT N 6042-014					I,	(204.0245.01) 2.INCH OR LESS	(204.0245.02) 15-INCH	(204.0245.03) 18-INCH	(204.0245.04) 21-INCH	(204.0245.05) 24-NCH	(204.0245.06) 30-INCH	(204.0245.07) 48-INCH	(204.0245.08) 54-INCH
Addendum No. ID 5992-10-16 Revised Sheet: Pr	25. N. 25. N. 19. RT 19. RT 19. LT 19. LT 16. LT 16. LT 16. LT 16. LT 16. LT 17. RT 17			_	O STATION		LF	T.	4	5	H	4	H	ы
Addendum No. ID 5992-10-16 Revised Sheet December 9, 20	19 R I 19 L I 16 L I 57 R I 21 L I 43 R I 17 R I 14 R I			15+60	15+68	2 12 13	8 -		- 50	1 1				
### Addendum No. ID 5992-10-16 Revised Sheet December 9, 20	19' LT 16' LT 57' RT 21' LT 43' RT 17' RT			15+66	15+73	LT&RT	1 1	38.53				1 1		
### Addendum No. ID 5992-10-166 Revised Sheet December 9, 20 Hall H	57 RT 21 LT 43 RT 17 RT 14 RT			15+66 16+10	15+90 16+75	5 5	59							
Addendum No. ID 5992-10-16 Revised Sheet; 10	43' RT 17' RT 14' RT	- ·		16+95 17+51	17+31 18+32	55	8 8					i i		
## Addendum No. ID 5992-10-16 Revised Sheet: ### Addendum No. ID 5992-1	7, 7 TR T			18+31	18+32	RT & LT	\$ 0	•	•	•	•	•	ŗ	•
Addendum No. ID 5992-10-16 Revised Sheet December 9, 20 10 10 10 10 10 10 10 10 10 10 10 10 10 1				18+32	19+04	5 5	73							
## Addendum No. ID 5992-10-16 Revised Sheet (December 9, 20 ### Addendum No. ID 5992-10-16	32' RT 32' RT			18+81	19+05	RT	26	- 99						
Addendum No. ID 5992-10-16 Revised Sheet (December 9, 200 III III III III III III III III III	24" LT			19+04	19+18	LT&RT	40	ţ ·						
## Addendum No. ID 5992-10-16 Revised Sheet 1 December 9, 20 ### Addendum No. ID 5992-10-16 Revised Sheet 2 December 9, 20 ### Addendum No. ID 5992-10-16 Revised Sheet 3 December 9, 20 ### Addendum No. ID 5992-10-16	14' RT 21' I T			19+04	19+68	55		63		1 1				
## Addendum No. ID 5992-10-16 Revised Sheet 3 December 9, 20 ## Add No. ID 5992-10-16 Revised Sheet 3 December 9, 20 ## Add No. ID 5992-10-16 Revised Sheet 3 December 9, 20 ## Add No. ID 5992-10-16 Revised Sheet 3 December 9, 20 ## Add No. ID 5992-10-16 Revised Sheet 3 December 9, 20 ## Add No. ID 5992-10-16 Revised Sheet 3 December 9, 20 ## Add No. ID 5992-10-16 Revised Sheet 3 December 9, 20 ## Add No. ID 5992-10-16 Revised Sheet 3 December 9, 20 ## Add No. ID 5992-10-16 Revised Sheet 3 December 9, 20 ## Add No. ID 5992-10-16 Revised Sheet 3 December 9, 20 ## Add No. ID 5992-10-16 Revised Sheet 3 December 9, 20 ## Add No. ID 5992-10-	15' RT	· -		20+65	21+51	5	ė į	98	,	i	ı	i	ı	٠
Addendum No. ID 5992-10-16 Revised Sheet C December 9, 200 The Sheet C Sheet	21' LT 25' RT			20+93	20+93	LT & RT RT	3 88							
Addendum No. IID 5992-10-16 Revised Sheet C December 9, 2010 2010 2010 2010 2010 2010 2010 201	40'RT			21+34	21+53	RT	} •	26	•	i	•			
Addendum No. III	17' RT 26' I T	- - 1		21+51	21+55	55	ا ي	. 2	• •	1 1	• •	i i	• •	
Addendum No. III	27 LT			21+53	21+55	RT & LT	i i	34		i i				
Addendum Mo. ID 5992-10-16 Revised Sheet 3 December 9, 220 Addendum Mo. ID 5992-10-16 Addendum Mo. ID 5992-10 Addendum Mo. ID 5992-10 Addendum Mo. ID 59	22' RT	-		21+92	22+06	5!	ı	14	ı	i	•	ı	ı	•
Addendum No. ID 5992-10-16 Revised Sheet 3 December 9, 20 25-10 5992 5992	12 KI 32' LT			23+35	23+42	: L		7						. .
Addendum No. ID 5992-10-16 Revised Sheet 3 December 9, 200 MINITED ON ORDINATE STATE OF STATE	25' LT	- ,		23+57	23+67	5	. ;	1	•	•	•	ı	•	•
Addendum No. IID 59937 27-10-16 See 1				23+67	24+31	로 그	F •		. 2					
Addendram Address Ad		 -		23+67	24+10	R	- 60		49	i		ı		٠
Addendum No. II	34'LT	- ·		24+10	24+31	RT & LT	og -		47			1 1		
Addendum No. ID 25955-10-16 Excessed Sheet 3 Expect Sheet Sh	37' RT 30' PT			24+31	26+30	55		• •	198	1 1	127	i i	• •	
Addendum No. ID 59985-10-16 Revised Sheet 3 Sheet 394-60	26'RT			27+18	27+58	RT	42							
Addendum No. II	23'RT 23'IT			27+58 27+58	27+59	RT & LT RT	38							• •
The state of the	3'RT	- - -		27+59	27+60	<u> </u>	<u>.</u> 6							
Addendam No. ID 5992-10-16 See 3 314-9	61'RT 26'LT	- 1		27+59	27+68	ᆸ	- 4				ை			
Addendam No. ID 59952-10-16 Revised Sheet 3 Set 80 38-60 RT 390 Revised Sheet 3 Set 80 38-60 RT 8-17 Set 80 38-60	42' RT	. .		27+63	27+79	- K	31		,		,	•		
11-48 31-46 1 3-50	34' LT 1' RT	- - 1		27+73	27+79	F =	9 1				33.			
1	35'RT	-		31+49	31+65	: 5 }	i	• ;		ı	17	i		٠
1	34 KI 49'RT			32+98	36+48	z Iz	ıı	350				ıı		. .
1	16' RT 13' I T	- - 1		36+48	36+60	ᅜ	1 00	18						
Addend RI & LI & L	14'LT			36+67	36+67	LT&RT	46					i		
1	16' KI 17' RT			45+78 46+02	46+46	RI & LI	46					. .		
Addendum No. ID 5995-10-19	32'LT			46+40	46+46	LT & RT	89	. 6	1	ı	1	i		ı
Addendum No. 1D 5995-10-19 Existence (COUNTY: DANE MISCELLANEOUS QUANTITIES MISCELLANEOUS QUANTITIES MISCELLANEOUS GUANTITIES MISCELLANEOUS GUANTITI	204" LT	- -		46+40	652+31	רן א רן		2	214	i i				
Addendum No. ID 5992-10-16 Revised Sheet 333 HWY: ATWOOD AVENUE COUNTY: DANE MISCELLANEOUS QUANTITIES MISCELLANEOUS QUANTITIES MISCELLANEOUS GUANTITIES PLOT DATE: 4/4/2019 355 PM PLOT DATE: 4/4/2019 PM PLOT DATE: 4/4/4	180' LT 174' I T	F 1		47+36	47+38	LT & RT	\$	HINENOO)	D ON NEXT SHEE					•
Addendum No. ID 5992-10-16 Revised Sheet 333 HWY: ATWOOD AVENUE COUNTY: DANE MISCELLANEOUS QUANTITIES PLOT MARK: ATWOOD AVENUE PLOT MARK: ALWOOD	13 LT								D ON NEAL SHEET	-				
HWY: ATWOOD AVENUE COUNTY: DANE RICTEATE: 4/4/2009 3555PM RICTEATE RICTEATE: 4/4/2009 3555PM RICTEATE: 4/4/2009 AND RICTEATE: 4/4/4/2009 AND RICTEATE: 4/4/2009 AND RICTEATE: 4/4/2009 AND RICTEATE	29' LT 21' LT											IC R		
HWY: ATWOOD AVENUE COUNTY: DANE RICTEATE: 4/3/2019 3555 PM RICTEATE RICTEATE: 4/3/2019 3555 PM RICTEATE RICTEATE: 4/3/2019 3555 PM RICTEATE: 4/3/2019 AM RICT	21'LT IN 6243-040) 5 ev		
HWY: ATWOOD AVENUE COUNTY: DANE ROTEATE: 4/3/2019 33.5 PM RICCELLANEOUS QUANTITIES ROTEATE: 3.33.	FOUND ELSEWHERE											99 ise		
HWY: AIWOOD AVENUE COUNTY: DANE POTDATE: 4/3/2019 355 PM POTDATE: 4/3/2019 PM POT	3			- 1								2-′ d \$	İ	
No. 1-16 neet 39, 200 sass PM storing asserting the storing sass PM storing asserting the storing sass PM stor	┪	Y: ATWOOD AVENUE	CON	_			MISCELLAN	OUS QUANTIT	IES			10 Sh		332
	037801/GADUSHEEISPLAN(030201-ML BURUFRLUWO :- 080201-mq				PLOI DATE.	4/3/2019 300 r	N. C.		PLUTINA	WE:	,	-16 eet 3		WISDOT/C

SIZE 04. (204.0245.04) 21-INCH

SIZE 03. (204.0245.03) 18-INCH

SIZE 02. (204.0245.02) 15-INCH

SIZE 01. (204.0245.01) 12-INCH OR LESS

CATEGORY

က

266 49 332

47+39 52+38 51+43 51+43 55+04 55+04 58+76 70+12 1102+17 1102+17 102-10 652+28 652-28 652-48

47+38 47+38 47+38 52+37 52+38 52+38 55+04 70+04 1102+17 1102+17 1102+17 652+30 652+30

REMOVING STORM SEWER (CONTINUED)

Addendum No. 02 ID 5992-10-16 Revised Sheet 333 December 9, 2022

				*	*			
				(650.4500)	(650.5000)	(650.9911.01)	(650.8000)	(650.9920)
				SUBGRADE	BASE	SUPPLEMENTAL	RESURFACING	SLOPE
						CONTROL	REFERENCE	STAKES
CATEGORY	/ STATION	TO STATION	LOCATION	5	4	EACH	5	۳
0010	12+75	68+11	LT & RT	5,536	5,536		•	5,536
	68+11	70+27	LT & RT	•	٠	•	216	•
	97+04	107+00	LT & RT	i	ı		Ē	966
	00+09	652+69	LT & RT	569	269	•	•	569
	200+00	206+17	R	•	٠	•	•	617
		PROJECT 5992-10-16				+		•
	Š	CATEGORY 0010 TOTALS	S.	5,805	5,805	-	216	7,418
0100	LAKELAND AVE	AKELAND AVENUE PARKING LOT	LT & RT	389	389			389
	CA	CATEGORY 0100 TOTALS	S,	389	389	0	0	389
		PROJECT TOTALS		6,194	6,194	1	216	7,807

	*		*	
			(204.0210) REMOVING	
			MANHOLES	
CATEGORY	STATION	LOCATION	EACH	NOTES
0030	19+51	13' RT	1	AT&T MANHOLE
	111+32	9' RT	-	AT&T MANHOLE
	112+21	8'LT	-	AT&T MANHOLE
	33+63	13' RT	-	AT&T MANHOLE
	116+24	6' RT	-	AT&T MANHOLE
	39+29	14' RT	-	AT&T MANHOLE
	45+65	48' RT	-	AT&T MANHOLE
	45+90	12' RT	-	AT&T MANHOLE
	61+47	21'LT	-	AT&T MANHOLE
	PROJEC	PROJECT TOTAL	6	

				(204.0210) REMOVING	
3				MANHOLES	
ĺ	CATEGORY	STATION	LOCATION	EACH	NOTES
ٰ د	0030	19+51	13' RT	1	AT&T MANHOLE
		111+32	9' RT	-	AT&T MANHOLE
٠		112+21	8′LT	-	AT&T MANHOLE
_		33+63	13' RT	-	AT&T MANHOLE
		116+24	6' RT	-	AT&T MANHOLE
<u>ا</u>		39+29	14' RT	-	AT&T MANHOLE
		45+65	48' RT	-	AT&T MANHOLE
د		45+90	12' RT	-	AT&T MANHOLE
		61+47	21' LT	-	AT&T MANHOLE
ا ا		PROJEC	PROJECT TOTAL	6	
*	ADDITIONAL (QUANTITIES	*ADDITIONAL QUANTITIES FOUND ELSEWHERE	VHERE	
		•	•		•

5992-10-16

PROJECT NO:

Е

SHEET

MISCELLANEOUS QUANTITIES

COUNTY: DANE

HWY: ATWOOD AVENUE

Addendum No. 02 ID 5992-10-16 Revised Sheet 357 December 9, 2022

		COMMENTS	FIELD LOCATED	FIELD LOCATED													PARKS PULLBOX	PARKS PULLBOX						
	* (653.0905) REMOVING PULL BOXES	EACH	٠	•	i	•		•	•	•	•		•	•	•	٠		٠	0		-	1	2	2
STREET LIGHTING PULLBOXES	* (SPV.0060.26) ELECTRICAL PULLBOX TYPE I	EACH 1	-	-	-	_	-	-	-	_	-	-	-	-	-	-	-	-	17	1		•	-	18
REET LIGHT		OFFSET	1.L	16' R	7.5 R	29' R	25.5' L	'n.	28' R	29' R	15' R	6'R	28' R	4.5' L	17' R	26' L	14' R	14' R	LS LS	19' R	28 R	30' R	LS.	
RS		STATION 18+28	102+66	98+61	27+95	27+96	36+33	36+33	36+33	39+79	46+87	45+46	50+73	50+72	55+75	68+05	111+38 (PATH)	112+33 (PATH)	CATEGORY 0040 TOTALS	27+90	09+59	67+67	CATEGORY 0080 TOTALS	PROJECT TOTALS
		CATEGORY STRUCTURE	_	HH21	HH22	HH23	HHZ6	HH27	HH28	HHZ9	HH40	HH48	HH52	HH53	HH58	99HH	HH26	HH71	CATEG	0800 HH60	HH64	HH65	CATEG	PRO

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

FROM STATION OFFSET STA 24457,4 28,7 R 274 46+30.6 76,2 L 46-

5992-10-16 PROJECT NO:

HWY: ATWOOD AVENUE

က

(SPV.0060.14) STREET LIGHT REMOVAL EACH

(204.0195)
REMOVING
CONCRETE BASES
EACH

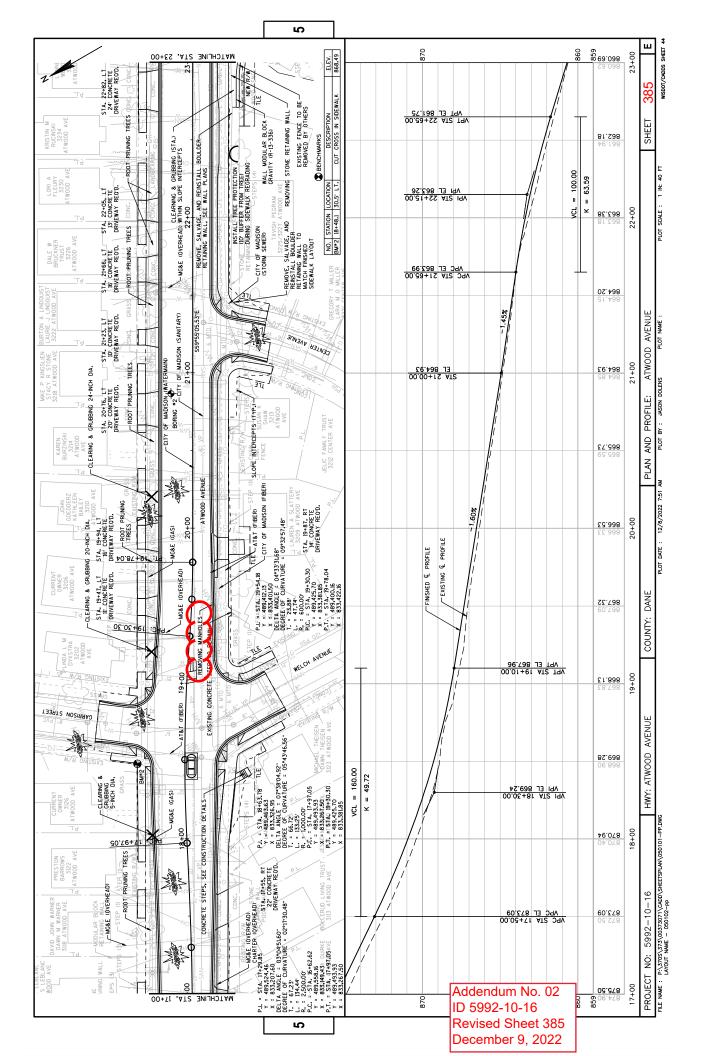
STREET LIGHTING REMOVALS

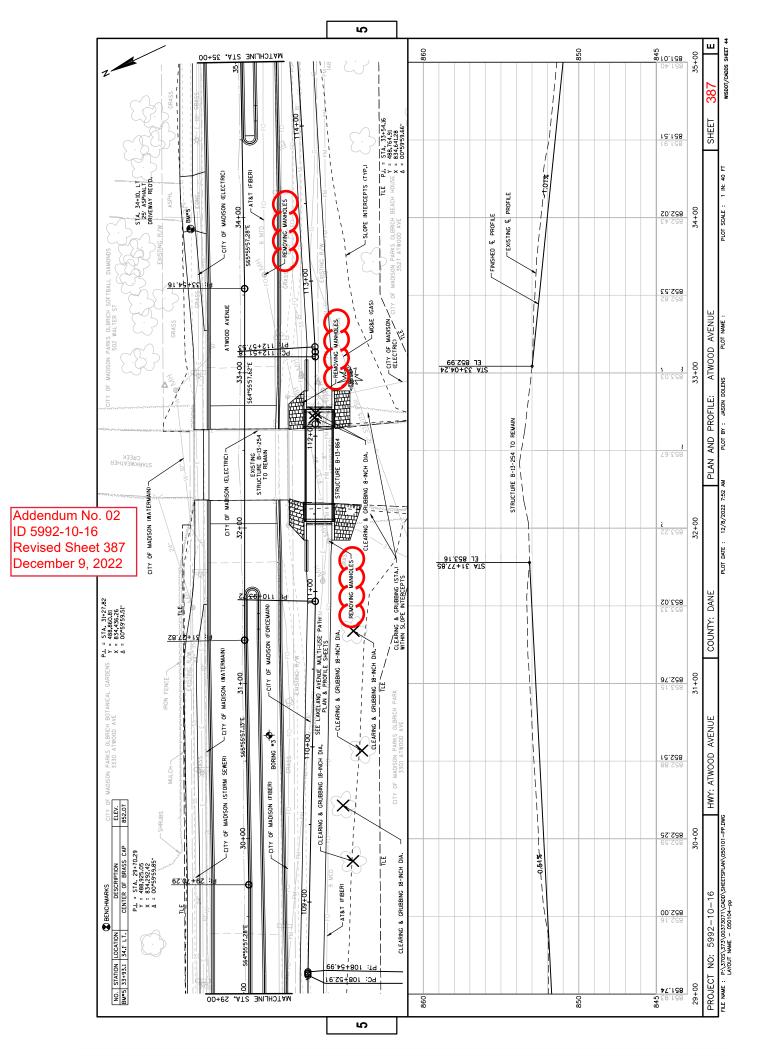
COUNTY: DANE

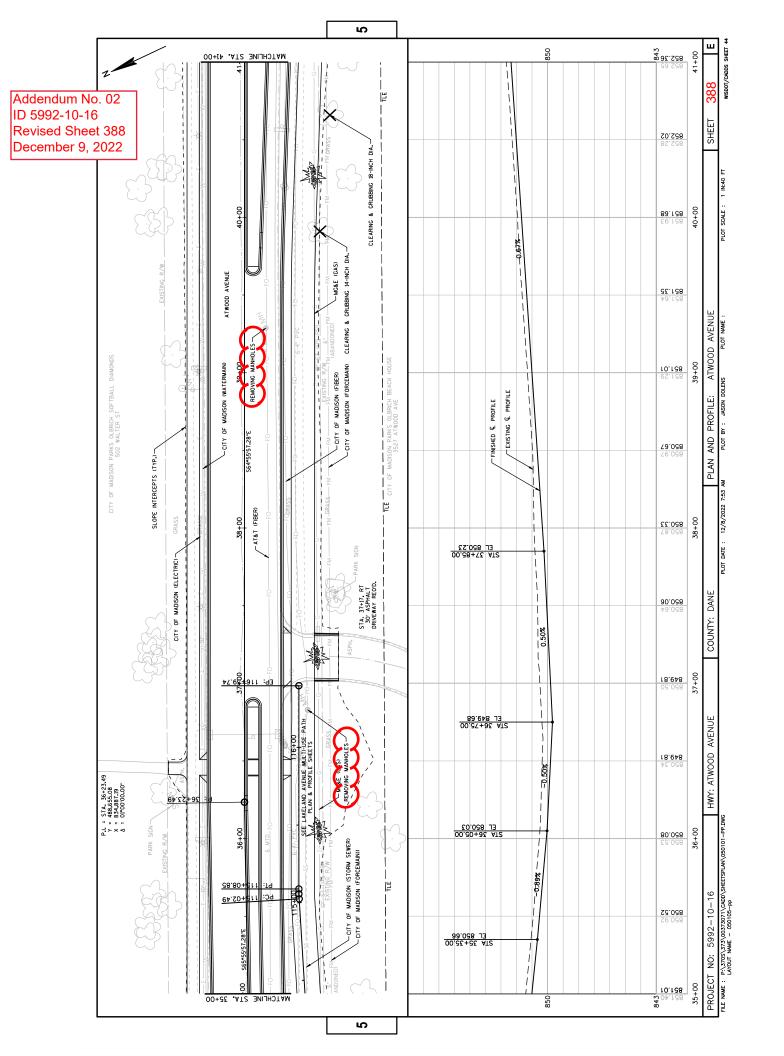
MISCELLANEOUS QUANTITIES

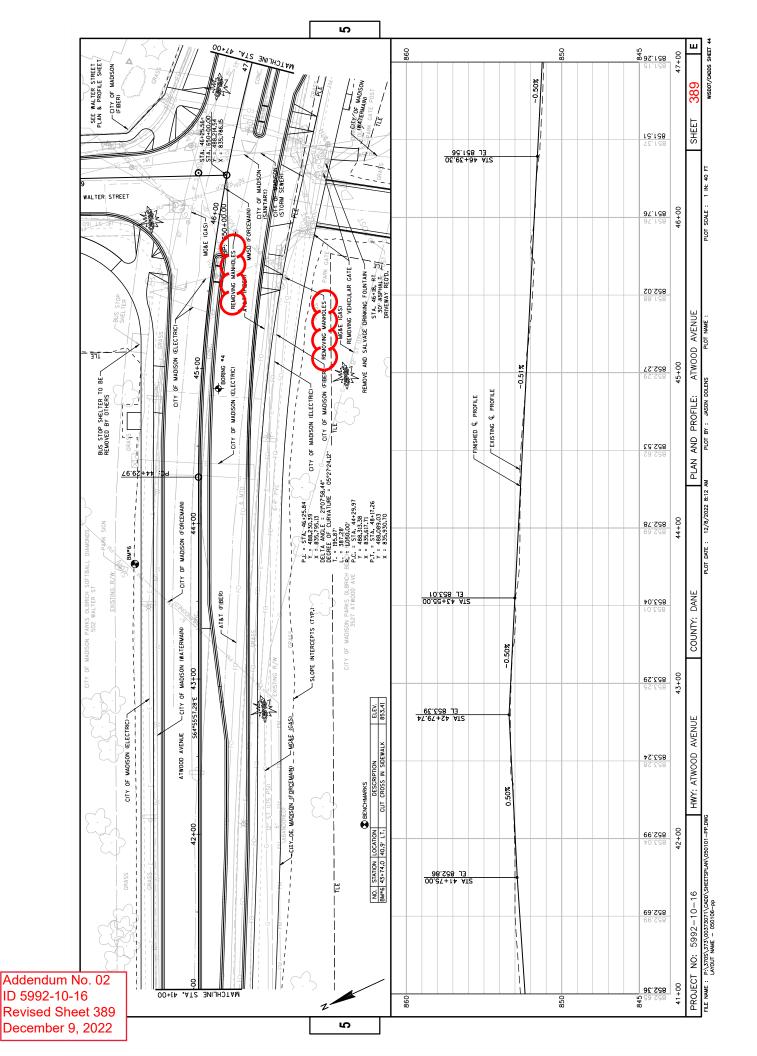
Е

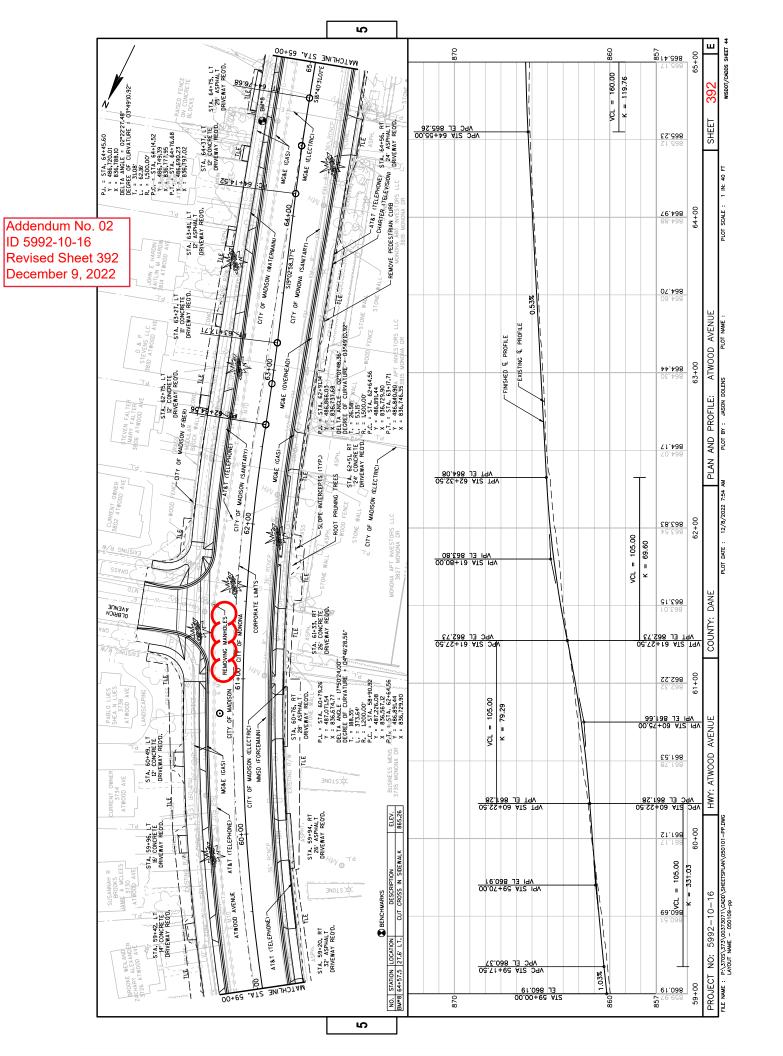
SHEET

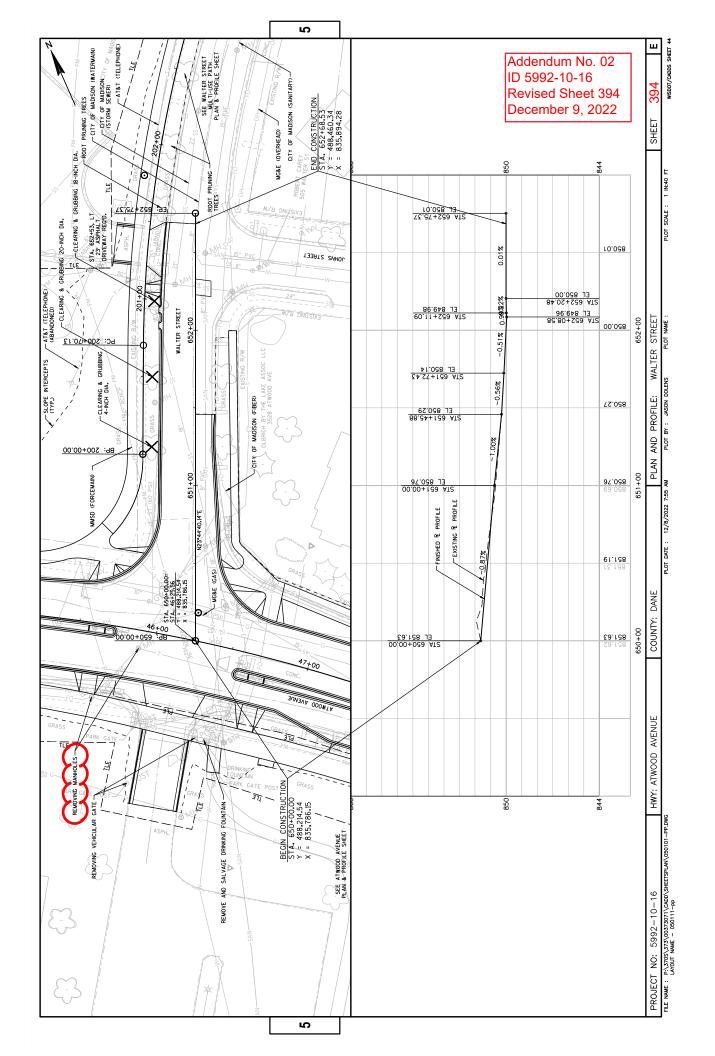


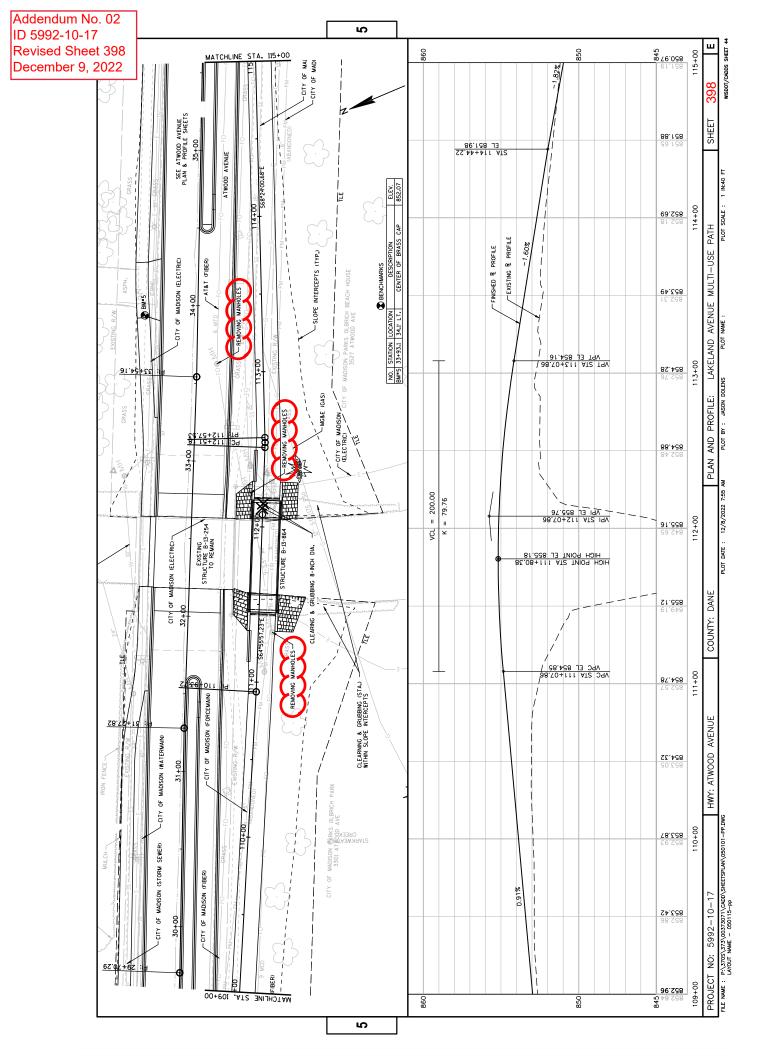


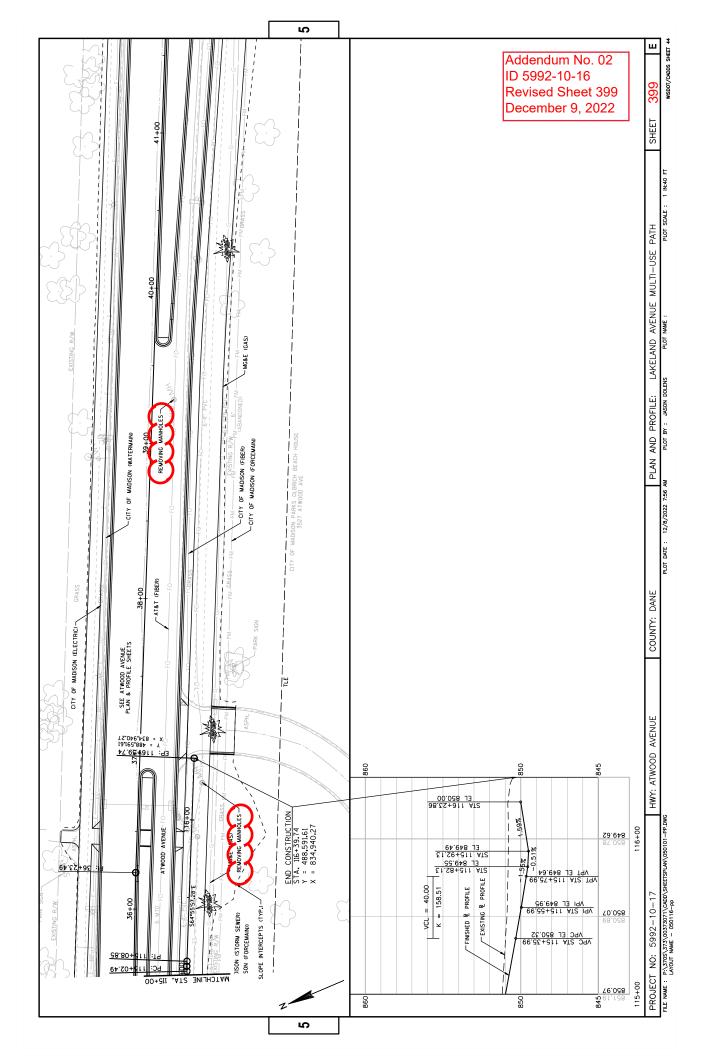


















Page 1 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	3.000 STA		
0004	201.0120 Clearing	408.000 ID		
0006	201.0205 Grubbing	3.000 STA	<u>-</u>	
8000	201.0220 Grubbing	408.000 ID		
0010	204.0100 Removing Concrete Pavement	20,085.000 SY		
0012	204.0115 Removing Asphaltic Surface Butt Joints	14.000 SY		
0014	204.0120 Removing Asphaltic Surface Milling	1,235.000 SY	·	
0016	204.0130 Removing Curb	68.000 LF		
0018	204.0150 Removing Curb & Gutter	8,055.000 LF	·	·
0020	204.0155 Removing Concrete Sidewalk	8,095.000 SY		
0022	204.0165 Removing Guardrail	45.000 LF		
0024	204.0195 Removing Concrete Bases	35.000 EACH		
0026	204.0210 Removing Manholes	32.000 EACH		
0028	204.0220 Removing Inlets	38.000 EACH	<u>-</u>	
0030	204.0245 Removing Storm Sewer (size) 01. 12-Inch or Less	1,063.000 LF		
0032	204.0245 Removing Storm Sewer (size) 02. 15-Inch	2,193.000 LF	·	.



Page 25 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0724	SPV.0165 Special 01. Wall Modular Block Gravity R-13-336	770.000 SF	·	
0726	SPV.0165 Special 02. Cut-Stone Boulders	476.000 SF		
0728	SPV.0165 Special 03. High Friction Colored Surface, Green	5,670.000 SF	·	
0730	SPV.0170 Special 01. Pavement Cleanup	79.000 STA		<u></u>
0732	SPV.0180 Special 01. Raised Concrete Crosswalk	176.000 SY		
0734	SPV.0180 Special 02. Shredded Hardwood Bark Mulch	915.000 SY		
0736	SPV.0180 Special 03. Planting Mix Topsoil	915.000 SY		
0738	SPV.0200 Special 01. Construct Inside Drop, 6-Inch	5.520 VF	<u>-</u>	
0740	SPV.0200 Special 02. Construct Inside Drop, 8-Inch	13.490 VF		
0742	SPV.0060 Special 96. Remove, Salvage, and Reinstall Electrical Service Meter Breaker Pedestal	2.000 EACH	·	
	Section: 000	1	Total:	·
			Total Bid:	



Wisconsin Department of Transportation

December 9, 2022

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:

Proposal #13: 5992-10-16, WISC 2023 094 5992-10-17, WISC 2023 094

C of Madison, Atwood Avenue
Fair Oaks Avenue – Cottage
Fair Oaks Avenue – Cottage

Grove Road
Local Street
Dane County
Grove Road
Local Street
Dane County

5992-10-18

C of Madison, Atwood Avenue Fair Oaks Avenue – Cottage

Grove Road Local Street

Dane County

Letting of December 13, 2022

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

Schedule of Items:

Added Bid Item Quantities					
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Quantity Added	Proposal Total After Addendum
511.1100	Temporary Shoring	SF	0	560	560

Deleted Bid Item Quantities					
Bid Item	Item Description	Unit	Proposal Total Prior to Addendum	Proposal Quantity Change (-)	Proposal Total After Addendum
512.1000	Piling Sheet Steel Temporary	SF	560	-560	0

Plan Sheets:

Revised Plan Sheets		
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)	
89	Erosion Control Legend – Updated Bid Item Name	
345	Miscellaneous Quantities – Updated MQ Table	

Schedule of Items

Attached, dated December 9, 2022, are the revised Schedule of Items Pages 1 - 25.

Plan Sheets

The following $8\frac{1}{2}$ x 11-inch sheets are attached and made part of the plans for this proposal:

Revised: 89 and 345

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

END OF ADDENDUM

						D :	dend 5992 /ise cem	2-1 d S	0-1 She	l6 et	34	5						CULVERT PIPE CHECKS	(628.7565) CULVERT PIPE CHECKS ATION LOCATION EACH 5-37 69 LT 3 PROJECT TOTAL 3			TRACKING PADS (628.7560)	TRACKING PADS DESCRIPTION EACH INDICETER TED A					SHEET 345 E	WISDOT/CADDS SHEET 42
	(SPV.0180.02) SHREDDED HARDWOOD BARK MULCH SY	5	1 1 1		1 1				1 1			1 1		915	915	0	915	CULVEF	CATEGORY STATION 0010 45+37 PROJ			TRA	CATEGORY DES						
	(SPV.0085.01) SHORTGRASS PRAIRIE SEED MIX					1.05	0.56	1.69						ı	3.30	0.00	3.30												AME :
	(SPV.0180.03) PLANTING MIX TOPSOIL SY	5				289	157	469						į	915	0	915		(628.1910) EMERGENOY EACH 6		(628.6005) TURBIDITY BARRIERS SY	86 64 80	70 300	4	11100)	TEMPORARY	560 560 560) Series	ENS PLOT NAME
	(630.0500) SEED WATER MGAI	33	8 8 4	2 2 3	84 33	200 16	0 92 0 02	60	72 9	105 20	172 11	16 28	0 0	115	1,230	6	1,239	CONTROL	1905) CH 2	RS	NO.	RT LT RT	R	ک				ALCO CALLED	PLOT BY: JASON DOLENS
0	(630.0140) SEEDING MIXTURE NO. 40	} o -	е Ф С	4 7	10 27	64 - 64	21.8	19	333	34	55 4	ഗത	0 0	35	375	3	378	MOBILIZATIONS EROSION CONTROL	(6) DESCRIPTION PROJECT 5992-10-16 PROJECT TOTALS	TURBIDITY BARRIERS	5	10 32+20 50 32+60 50 32+70	PROJ	ONIGORS VONGOMET	IEMPOKAKY SHOK		10 STATION LOCATION 54+68 RT PROJECT TOTAL		
FINISHING ITEMS	(629.0210) FERTILIZER TYPE B	0.32	0.09	0.15	0.93	0.18	0.73 0.10	0.67	0.80	1.17	1.92 0.12	0.18	0.00	1.58	14.00	0.10	14.10	MOBI	CATEGORY DES 0010 PROJEC PROJE		₹	32+10 32+50 32+60	54+00	4			54+02	8	ATE: 4/3/2019 3:55 PN
	(628.2008) EROSION MAT URBAN CLASS I TYPE B	511 50	147 326 108	232	581 1,482	3,539	1,151	1,060	1,275 157	1,865 351	3,046 197	289 496	9 9	1,805	20,600	160	20,760		CATE 01		CAI			3		ا د	CAIEGORY 0010	Y: DAN	PLOT DATE:
	<u> </u>	511	147 326 108	232	581	3,539	1,151	1,060	1,275 157		_	289 496	9 9	1,805	20,600	160	20,760											COUNTY	-
	OCATION	LT RT	RT LT	R R	אַ ד	RT (MEDIAN)	LI RT RT (MEDIAN)	RT RT (MEDIAN)	LT & RT RT	בן צן	RT (STORM OUTLET) LT	55	1 1		TOTALS		TALS		(SPV.0060.92) REMOVE, SAVLVAGE, AND RENSTALL RIPRAP HEAVY EACH 1			(628.1520) SILT FENCE	ITENANCE LF	200 600 55	250	2,000		ENUE	
	NOTATA OT	18+61	18+85 23+91 21+11	23+65	32+18 32+16	31+56	45+78 37+01 36+85	46+02	206+36 651+95	58+23 51+16	54+62 55+29	61+29 68+11	70+94	UNDISTRIBUTED	CATEGORY 0010 TOTALS 68+11	CATEGORY 0060 TOTALS	PROJECT TO		(645.0120) (SF GEOTEXTLE REMO TYPE HR AND SY 13			(628.1504) (6: SILT FENCE SIL		200 800 350	250	2,000		HWY: ATWOOD AVENUE	
	CATEGORY STATION		15+59 18+85 10+03	21+32	24+19 27+05	97+10 27+43	32+62 32+66 34+52	37+32	200+00 650+46	46+37 46+39	51+05 51+52	55+60 61+58	70+86		0000 58+23			RIPRAP	(606.0200) RIPRAP MEDIUM CY 3.11		SILT FENCE	, · · · · · · · · · · · · · · · · · · ·	ON LOCATION	34+50 RT 54+00 RT	ED	PROJECT TOTALS		NH H	030201-MQ BORDER.DWG
		ı		I		1		ı			•		ı	ı	•		. •		RY STATION LOCATION 32+66 47* LT 54-32 507* RT PROJECT TOTALS				_	27+30 32+70 50+25 51+70		PROJE		5992-10-16	P.\3700\373\003730\7000\SHETSPLAN\030201-MQ BORDER.DWG
			_		<u>ლ</u>		_												CATEGORY 0010				CATE	<u> </u>				PROJECT NO:	FILE NAME : P:\370S\







Page 1 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0002	201.0105 Clearing	3.000 STA		
0004	201.0120 Clearing	408.000 ID	·	·
0006	201.0205 Grubbing	3.000 STA		
0008	201.0220 Grubbing	408.000 ID		
0010	204.0100 Removing Concrete Pavement	20,085.000 SY		
0012	204.0115 Removing Asphaltic Surface Butt Joints	14.000 SY		
0014	204.0120 Removing Asphaltic Surface Milling	1,235.000 SY		
0016	204.0130 Removing Curb	68.000 LF		
0018	204.0150 Removing Curb & Gutter	8,055.000 LF	·	
0020	204.0155 Removing Concrete Sidewalk	8,095.000 SY		
0022	204.0165 Removing Guardrail	45.000 LF		
0024	204.0195 Removing Concrete Bases	35.000 EACH		
0026	204.0210 Removing Manholes	32.000 EACH		
0028	204.0220 Removing Inlets	38.000 EACH	<u></u>	
0030	204.0245 Removing Storm Sewer (size) 01. 12-Inch or Less	1,063.000 LF		
0032	204.0245 Removing Storm Sewer (size) 02. 15-Inch	2,193.000 LF		







Page 2 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0034	204.0245 Removing Storm Sewer (size) 03. 18- Inch	592.000 LF		·
0036	204.0245 Removing Storm Sewer (size) 04. 21-Inch	34.000 LF	·	
0038	204.0245 Removing Storm Sewer (size) 05. 24-Inch	487.000 LF	·	
0040	204.0245 Removing Storm Sewer (size) 06. 30-Inch	56.000 LF		
0042	204.0245 Removing Storm Sewer (size) 07. 48- Inch	88.000 LF		
0044	204.0245 Removing Storm Sewer (size) 08. 54-Inch	15.000 LF		<u></u>
0046	204.0280 Sealing Pipes	12.000 EACH		
0048	204.9060.S Removing (item description) 01. Vehicular Gate	1.000 EACH		
0050	204.9060.S Removing (item description) 02. Sidewalk Trench Drain	1.000 EACH		
0052	204.9090.S Removing (item description) 01. Stone Retaining Wall	150.000 LF		
0054	204.9090.S Removing (item description) 02. Metal Railing	30.000 LF		
0056	205.0100 Excavation Common	51,632.000 CY		
0058	206.1001 Excavation for Structures Bridges (structure) 01. B-13-864	1.000 EACH		
0060	206.5001 Cofferdams (structure) 01. B-13-864	1.000 EACH	·	







Page 3 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0062	208.0100 Borrow	4,496.000 CY		·
0064	210.1500 Backfill Structure Type A	200.000 TON		
0066	213.0100 Finishing Roadway (project) 01. 5992- 10-16	1.000 EACH	<u> </u>	
0068	214.0100 Obliterating Old Road	4.000 STA		
0070	305.0110 Base Aggregate Dense 3/4-Inch	539.000 TON		
0072	305.0120 Base Aggregate Dense 1 1/4-Inch	38,372.000 TON		
0074	310.0115 Base Aggregate Open-Graded	137.000 CY		
0076	312.0110 Select Crushed Material	29,484.000 TON		
0078	405.1000 Stamping Colored Concrete	40.590 CY		<u> </u>
0800	415.0410 Concrete Pavement Approach Slab	142.000 SY		
0082	416.0170 Concrete Driveway 7-Inch	823.000 SY	·	
0084	416.0270 Concrete Driveway HES 7-Inch	98.000 SY		
0086	450.4000 HMA Cold Weather Paving	1,800.000 TON		
0088	455.0605 Tack Coat	1,348.000 GAL		
0090	460.2000 Incentive Density HMA Pavement	6,746.000 DOL	1.00000	6,746.00
0092	460.2007 Incentive Density HMA Pavement Longitudinal Joints	11,200.000 DOL	1.00000	11,200.00







Page 4 of 25

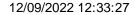
Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0094	460.5223 HMA Pavement 3 LT 58-28 S	5,657.000 TON	·	
0096	460.5224 HMA Pavement 4 LT 58-28 S	3,344.000 TON		
0098	465.0120 Asphaltic Surface Driveways and Field Entrances	63.000 TON		
0100	465.0125 Asphaltic Surface Temporary	2,000.000 TON		
0102	502.0100 Concrete Masonry Bridges	69.000 CY		
0104	502.3101 Expansion Device	32.600 LF		
0106	502.3200 Protective Surface Treatment	236.000 SY		
0108	502.4204 Adhesive Anchors No. 4 Bar	64.000 EACH		
0110	504.2000.S Precast Concrete Box Culvert (ft X ft) 01. 3 FT x 6 FT	1,455.000 LF	·	·
0112	505.0400 Bar Steel Reinforcement HS Structures	4,730.000 LB		
0114	505.0600 Bar Steel Reinforcement HS Coated Structures	2,920.000 LB		
0116	506.8006.S Prefabricated Steel Truss Pedestrian Bridge LRFD (structure) 01. B-13-864	1.000 EACH		
0118	509.0301 Preparation Decks Type 1	12.000 SY		<u> </u>
0120	509.0302 Preparation Decks Type 2	6.000 SY		
0122	509.0310.S Sawing Pavement Deck Preparation Areas	112.000 LF		







Page 5 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0124	509.0500 Cleaning Decks	16.000 SY		
0126	509.2000 Full-Depth Deck Repair	1.000 SY		
0128	509.2100.S Concrete Masonry Deck Repair	3.000 CY		
0130	509.5100.S Polymer Overlay	230.000 SY		
0132	509.9015.S Removing Polymer Overlay (structure) 01. B-13-254	246.000 SY	·	
0134	511.1200 Temporary Shoring (structure) 01. R-13- 336	1,100.000 SF		
0138	516.0500 Rubberized Membrane Waterproofing	14.000 SY		
0140	517.1010.S Concrete Staining (structure) 01. R-13- 336	770.000 SF	·	
0142	520.8000 Concrete Collars for Pipe	2.000 EACH		
0144	522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	2.000 EACH		
0146	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	2.000 EACH	·	
0148	522.1048 Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	1.000 EACH	·	
0150	522.1066 Apron Endwalls for Culvert Pipe Reinforced Concrete 66-Inch	1.000 EACH		
0152	550.2106 Piling CIP Concrete 10 3/4 X 0.365-Inch	540.000 LF		
0154	601.0407 Concrete Curb & Gutter 18-Inch Type D	128.000 LF		







Page 6 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

0156 601.0600 406.000 Concrete Curb Pedestrian LF 0158 602.0410 38,420.000 Concrete Sidewalk 5-Inch SF 0160 602.0420 8,005.000 Concrete Sidewalk 7-Inch SF 0162 602.0515 572.000 Curb Ramp Detectable Warning Field Natural Patina SF 0164 602.0615 427.650 Curb Ramp Detectable Warning Field Radial Natural Patina SF 0166 602.1500 35.000 Concrete Steps SF 0168 603.8000 2,500.000 Concrete Barrier Temporary Precast Delivered LF 0170 603.8125 2,500.000 Concrete Barrier Temporary Precast Installed LF 0172 606.0200 3.110 Riprap Medium CY 0174 606.0300 44.000	ount
Concrete Sidewalk 5-Inch SF 0160 602.0420 8,005.000 Concrete Sidewalk 7-Inch SF 0162 602.0515 572.000 Curb Ramp Detectable Warning Field Natural Patina SF 0164 602.0615 427.650 Curb Ramp Detectable Warning Field Radial Natural Patina SF 0166 602.1500 35.000 Concrete Steps SF 0168 603.8000 2,500.000 Concrete Barrier Temporary Precast Delivered LF 0170 603.8125 2,500.000 Concrete Barrier Temporary Precast Installed LF 0172 606.0200 3.110 Riprap Medium CY	
Concrete Sidewalk 7-Inch	
Curb Ramp Detectable Warning Field Natural Patina SF	
Curb Ramp Detectable Warning Field Radial Natural Patina SF	
Concrete Steps SF	
Concrete Barrier Temporary Precast LF	
Concrete Barrier Temporary Precast LF	
Riprap Medium CY	
0174 606.0300 44.000	
Riprap Heavy CY	
0176 608.0312 893.000 Storm Sewer Pipe Reinforced Concrete LF	
0178 608.0315 324.000 Storm Sewer Pipe Reinforced Concrete LF	
0180 608.0318 32.000 Storm Sewer Pipe Reinforced Concrete LF	
0182 608.0324 1,351.000 Storm Sewer Pipe Reinforced Concrete LF	







Page 7 of 25

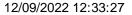
Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0184	608.0348 Storm Sewer Pipe Reinforced Concrete Class III 48-Inch	158.000 LF	·	
0186	608.0360 Storm Sewer Pipe Reinforced Concrete Class III 60-Inch	56.000 LF		
0188	608.0366 Storm Sewer Pipe Reinforced Concrete Class III 66-Inch	655.000 LF	·	
0190	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	691.000 LF		
0192	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	108.000 LF		
0194	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	680.000 LF		
0196	608.0424 Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	451.000 LF	·	
0198	608.0430 Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	451.000 LF	·	·
0200	608.6012 Storm Sewer Pipe Composite 12-Inch	11.000 LF		
0202	611.0535 Manhole Covers Type J-Special	50.000 EACH		
0204	611.0624 Inlet Covers Type H	91.000 EACH		
0206	611.0645 Inlet Covers Type MS-A	2.000 EACH		
0208	611.2033 Manholes 3x3-FT	11.000 EACH		
0210	611.2044 Manholes 4x4-FT	12.000 EACH		
0212	611.2055 Manholes 5x5-FT	3.000 EACH	<u>.</u>	







Page 8 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0214	611.2066 Manholes 6x6-FT	1.000 EACH		
0216	611.3230 Inlets 2x3-FT	84.000 EACH		
0218	611.3901 Inlets Median 1 Grate	2.000 EACH		
0220	611.8110 Adjusting Manhole Covers	7.000 EACH		
0222	611.8115 Adjusting Inlet Covers	1.000 EACH		
0224	611.8120.S Cover Plates Temporary	45.000 EACH		
0226	611.9800.S Pipe Grates	5.000 EACH		·
0228	612.0106 Pipe Underdrain 6-Inch	3,425.000 LF	•	·
0230	612.0406 Pipe Underdrain Wrapped 6-Inch	270.000 LF		
0232	612.0902.S Insulation Board Polystyrene (inch) 01. 2-Inch	916.560 SY		
0234	614.0905 Crash Cushions Temporary	5.000 EACH	•	
0236	616.0700.S Fence Safety	700.000 LF		
0238	618.0100 Maintenance And Repair of Haul Roads (project) 01. 5992-10-16	1.000 EACH		
0240	619.1000 Mobilization	1.000 EACH		
0242	620.0300 Concrete Median Sloped Nose	525.000 SF		
0244	624.0100 Water	445.000 MGAL		







Page 9 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0246	625.0100 Topsoil	20,760.000 SY		
0248	628.1504 Silt Fence	2,000.000 LF		<u>-</u>
0250	628.1520 Silt Fence Maintenance	2,000.000 LF		
0252	628.1905 Mobilizations Erosion Control	12.000 EACH		
0254	628.1910 Mobilizations Emergency Erosion Control	6.000 EACH		
0256	628.2008 Erosion Mat Urban Class I Type B	20,760.000 SY	·	·
0258	628.6005 Turbidity Barriers	300.000 SY	·	
0260	628.7005 Inlet Protection Type A	5.000 EACH	·	·
0262	628.7020 Inlet Protection Type D	153.000 EACH		
0264	628.7555 Culvert Pipe Checks	3.000 EACH		
0266	628.7560 Tracking Pads	4.000 EACH		
0268	628.7570 Rock Bags	20.000 EACH		
0270	629.0210 Fertilizer Type B	14.100 CWT		
0272	630.0140 Seeding Mixture No. 40	378.000 LB		
0274	630.0500 Seed Water	1,239.000 MGAL		
0276	637.2210 Signs Type II Reflective H	197.950 SF		
0278	637.2230 Signs Type II Reflective F	46.750 SF	·	<u></u>







Page 10 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0280	638.2102 Moving Signs Type II	43.000 EACH		
0282	638.2602 Removing Signs Type II	85.000 EACH		
0284	638.3000 Removing Small Sign Supports	66.000 EACH		
0286	638.4000 Moving Small Sign Supports	6.000 EACH		
0288	642.5401 Field Office Type D	1.000 EACH		·
0290	643.0300 Traffic Control Drums	45,000.000 DAY		
0292	643.0410 Traffic Control Barricades Type II	8,500.000 DAY		
0294	643.0420 Traffic Control Barricades Type III	11,944.000 DAY		
0296	643.0500 Traffic Control Flexible Tubular Marker Posts	700.000 EACH		·
0298	643.0600 Traffic Control Flexible Tubular Marker Bases	700.000 EACH		
0300	643.0705 Traffic Control Warning Lights Type A	25,888.000 DAY		
0302	643.0715 Traffic Control Warning Lights Type C	5,500.000 DAY		
0304	643.0800 Traffic Control Arrow Boards	300.000 DAY		·
0306	643.0900 Traffic Control Signs	45,516.000 DAY		·
0308	643.0920 Traffic Control Covering Signs Type II	10.000 EACH		·
0310	643.1000 Traffic Control Signs Fixed Message	321.640 SF		







Page 11 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0312	643.1050 Traffic Control Signs PCMS	100.000 DAY		
0314	643.3105 Temporary Marking Line Paint 4-Inch	42,500.000 LF		
0316	643.3150 Temporary Marking Line Removable Tape 4-Inch	13,000.000 LF	·	·
0318	643.3205 Temporary Marking Line Paint 8-Inch	100.000 LF		
0320	643.3250 Temporary Marking Line Removable Tape 8-Inch	60.000 LF	·	
0322	643.3505 Temporary Marking Arrow Paint	2.000 EACH		
0324	643.3550 Temporary Marking Arrow Removable Tape	2.000 EACH	·	·
0326	643.3805 Temporary Marking Stop Line Paint 18-Inch	150.000 LF		
0328	643.3850 Temporary Marking Stop Line Removable Tape 18-Inch	100.000 LF		
0330	643.3970 Temporary Marking Removable Mask Out Tape 10-Inch	100.000 LF	·	
0332	643.5000 Traffic Control	1.000 EACH		
0334	644.1410 Temporary Pedestrian Surface Asphalt	52,300.000 SF		
0336	644.1430 Temporary Pedestrian Surface Plate	2,300.000 SF		·
0338	644.1440 Temporary Pedestrian Surface Matting	4,000.000 SF		
0340	644.1601 Temporary Pedestrian Curb Ramp	4,350.000 DAY		







Page 12 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0342	644.1605 Temporary Pedestrian Detectable Warning Field	1,200.000 SF		
0344	644.1810 Temporary Pedestrian Barricade	23,300.000 LF		
0346	645.0111 Geotextile Type DF Schedule A	1,941.000 SY		
0348	645.0120 Geotextile Type HR	238.000 SY		
0350	646.1020 Marking Line Epoxy 4-Inch	14,425.000 LF	<u></u>	<u></u>
0352	646.3020 Marking Line Epoxy 8-Inch	1,350.000 LF		
0354	646.5020 Marking Arrow Epoxy	63.000 EACH		
0356	646.5120 Marking Word Epoxy	6.000 EACH		
0358	646.5220 Marking Symbol Epoxy	62.000 EACH		
0360	646.7120 Marking Diagonal Epoxy 12-Inch	175.000 LF		
0362	646.7420 Marking Crosswalk Epoxy Transverse Line 6-Inch	858.000 LF	·	
0364	646.8120 Marking Curb Epoxy	110.000 LF		
0366	646.8220 Marking Island Nose Epoxy	13.000 EACH		
0368	646.8320 Marking Parking Stall Epoxy	450.000 LF		
0370	646.9000 Marking Removal Line 4-Inch	1,500.000 LF		
0372	646.9200 Marking Removal Line Wide	600.000 LF		







Page 13 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal	here ID	Approximate		
Line Number	Item ID Description	Quantity and Units	Unit Price	Bid Amount
0374	646.9300 Marking Removal Special Marking	4.000 EACH		
0376	650.4000 Construction Staking Storm Sewer	136.000 EACH	·	·
0378	650.4500 Construction Staking Subgrade	13,168.000 LF	·	·
0380	650.5000 Construction Staking Base	13,168.000 LF	·	·
0382	650.5500 Construction Staking Curb Gutter and Curb & Gutter	16,584.000 LF		
0384	650.6501 Construction Staking Structure Layout (structure) 01. R-13-336	1.000 EACH		·
0386	650.6501 Construction Staking Structure Layout (structure) 02. B-13-864	1.000 EACH		·
0388	650.6501 Construction Staking Structure Layout (structure) 03. B-13-254	1.000 EACH		
0390	650.8000 Construction Staking Resurfacing Reference	216.000 LF	·	
0392	650.8501 Construction Staking Electrical Installations (project) 01. 5992-10-16	1.000 EACH		·
0394	650.9000 Construction Staking Curb Ramps	58.000 EACH		·
0396	650.9500 Construction Staking Sidewalk (project) 01. 5992-10-16	1.000 EACH		
0398	650.9911 Construction Staking Supplemental Control (project) 01. 5992-10-16	1.000 EACH		
0400	650.9920 Construction Staking Slope Stakes	7,807.000 LF		·







Page 14 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0402	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	8,038.000 LF		
0404	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	6,600.000 LF	<u></u>	
0406	652.0325 Conduit Rigid Nonmetallic Schedule 80 2-Inch	1,307.000 LF		
0408	652.0335 Conduit Rigid Nonmetallic Schedule 80 3-Inch	1,437.000 LF	<u></u>	
0410	652.0605 Conduit Special 2-Inch	55.000 LF		
0412	652.0615 Conduit Special 3-Inch	55.000 LF		
0414	652.0700.S Install Conduit into Existing Item	2.000 EACH		
0416	653.0905 Removing Pull Boxes	17.000 EACH		
0418	654.0110 Concrete Bases Type 10	1.000 EACH		
0420	655.0230 Cable Traffic Signal 5-14 AWG	1,349.000 LF		
0422	655.0240 Cable Traffic Signal 7-14 AWG	1,450.000 LF		
0424	655.0250 Cable Traffic Signal 9-14 AWG	480.000 LF		
0426	655.0615 Electrical Wire Lighting 10 AWG	5,594.000 LF		
0428	655.0620 Electrical Wire Lighting 8 AWG	8,245.000 LF		
0430	655.0630 Electrical Wire Lighting 4 AWG	24,345.000 LF		
0432	655.0800 Loop Detector Wire	1,751.000 LF		







Page 15 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0434	656.0201 Electrical Service Meter Breaker Pedestal (location) 01. Sta 46+84.5, 47.5' RT	1.000 EACH	·	
0436	656.0201 Electrical Service Meter Breaker Pedestal (location) 02. Sta 27+98.0, 51.0' RT	1.000 EACH	·	·
0438	656.0201 Electrical Service Meter Breaker Pedestal (location) 03. Sta 46+90.0, 47.5' RT	1.000 EACH		·
0440	657.0405 Traffic Signal Standards Aluminum 3.5- FT	2.000 EACH	·	
0442	657.0415 Traffic Signal Standards Aluminum 11-FT	4.000 EACH	·	
0444	657.0420 Traffic Signal Standards Aluminum 13-FT	3.000 EACH		
0446	658.0500 Pedestrian Push Buttons	11.000 EACH		
0448	658.5070 Signal Mounting Hardware (location) 01. Atwood Avenue & Walter Street	1.000 EACH	·	
0450	658.5070 Signal Mounting Hardware (location) 02. Atwood Avenue & Cottage Grove Road	1.000 EACH		
0452	678.0200 Fiber Optic Splice Enclosure	2.000 EACH	·	·
0454	678.0300 Fiber Optic Splice	576.000 EACH		
0456	678.0400 Fiber Optic Termination	42.000 EACH		
0458	690.0150 Sawing Asphalt	7,496.000 LF		
0460	690.0250 Sawing Concrete	5,247.500 LF		







Page 16 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0462	715.0502 Incentive Strength Concrete Structures	500.000 DOL	1.00000	500.00
0464	715.0720 Incentive Compressive Strength Concrete Pavement	500.000 DOL	1.00000	500.00
0466	740.0440 Incentive IRI Ride	6,550.000 DOL	1.00000	6,550.00
0468	999.1501.S Crack and Damage Survey	1.000 EACH	·	
0470	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	2,100.000 HRS	5.00000	10,500.00
0472	ASP.1T0G On-the-Job Training Graduate at \$5.00/HR	1,500.000 HRS	5.00000	7,500.00
0474	SPV.0035 Special 01. Abandon Sanitary Sewer- Slurry	28.490 CY		
0476	SPV.0060 Special 01. Root Pruning Trees	30.000 EACH	·	
0478	SPV.0060 Special 02. Pruning Tree	3.000 EACH	·	
0480	SPV.0060 Special 03. Grubbing Special 72-Inch	1.000 EACH	·	
0482	SPV.0060 Special 04. Remove, Salvage, and Reinstall Bicycle Rack	1.000 EACH		·
0484	SPV.0060 Special 05. Precast Sign Post Base	57.000 EACH	·	
0486	SPV.0060 Special 06. Sign Post Base for Concrete Installation	3.000 EACH		
0488	SPV.0060 Special 07. Manholes 8x8-FT Special	15.000 EACH	·	
0490	SPV.0060 Special 08. Sidewalk Trench Drain	1.000 EACH		·







Page 17 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0492	SPV.0060 Special 09. Concrete Pipe Support	6.000 EACH		
0494	SPV.0060 Special 10. Reconstruct Bench and Flowlines, Storm Sewer	1.000 EACH	·	·
0496	SPV.0060 Special 11. Utility Line Opening (ULO)	41.000 EACH	·	
0498	SPV.0060 Special 12. Locate and Reference Property Corners	20.000 EACH	·	
0500	SPV.0060 Special 13. Reset Property Corners	20.000 EACH		
0502	SPV.0060 Special 14. Street Light Removal	28.000 EACH		
0504	SPV.0060 Special 15. Traffic Signal Removal	3.000 EACH	<u>-</u>	
0506	SPV.0060 Special 16. Lighting Control Cabinet	2.000 EACH		
0508	SPV.0060 Special 17. LED Luminaire and Mounting Bracket Type 1	8.000 EACH		·
0510	SPV.0060 Special 18. LED Luminaire and Mounting Bracket Type 2	5.000 EACH		
0512	SPV.0060 Special 19. LED Luminaire and Mounting Bracket Type 3	4.000 EACH		
0514	SPV.0060 Special 20. LED Luminaire and Mounting Bracket Type 4	5.000 EACH	·	
0516	SPV.0060 Special 21. LED Luminaire and Mounting Bracket Type 5	45.000 EACH	·	
0518	SPV.0060 Special 22. Pole Aluminum 20-Foot Street Light, Black	5.000 EACH	·	·
0520	SPV.0060 Special 23. Pole 30-Foot, 11 Gauge	42.000 EACH		







Page 18 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0522	SPV.0060 Special 24. Pole 30-Foot, 7 Gauge	6.000 EACH		
0524	SPV.0060 Special 25. Pole 20-Foot, 7 Gauge	4.000 EACH		
0526	SPV.0060 Special 26. Electrical Pullbox, Type I	36.000 EACH		
0528	SPV.0060 Special 27. Electrical Pullbox, Type III	3.000 EACH		
0530	SPV.0060 Special 28. Electrical Pullbox, Type V	18.000 EACH		
0532	SPV.0060 Special 29. Electrical Pullbox, Type VII	3.000 EACH		
0534	SPV.0060 Special 30. Concrete Base Type G	9.000 EACH		
0536	SPV.0060 Special 31. Concrete Base Type LB-2	5.000 EACH		
0538	SPV.0060 Special 32. Concrete Base Type LB-3	44.000 EACH		
0540	SPV.0060 Special 33. Concrete Base Type LB-8	11.000 EACH		
0542	SPV.0060 Special 34. Concrete Base Type P	2.000 EACH		
0544	SPV.0060 Special 35. Concrete Base Type M	1.000 EACH		
0546	SPV.0060 Special 36. Concrete Base Offset	4.000 EACH		
0548	SPV.0060 Special 37. Transformer Base 16-Inch Steel	4.000 EACH		
0550	SPV.0060 Special 38. Inlet Covers Flat Temporary	10.000 EACH		
0552	SPV.0060 Special 40. NEMA TS2 Type 1 Traffic Signal Control Cabinet	1.000 EACH		







Page 19 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0554	SPV.0060 Special 41. Traffic Signal Ethernet Switch	1.000 EACH		
0556	SPV.0060 Special 42. Pedestal Base, Black	9.000 EACH		
0558	SPV.0060 Special 43. Traffic Signal Trombone Arms Aluminum 12-Foot	2.000 EACH		
0560	SPV.0060 Special 44. Traffic Signal Trombone Arms Aluminum 18-Foot	3.000 EACH		
0562	SPV.0060 Special 45. Traffic Signal Trombone Arms Aluminum 22-Foot	1.000 EACH		
0564	SPV.0060 Special 46. Traffic Signal Heads 12-Inch, 3-Section	13.000 EACH		
0566	SPV.0060 Special 47. Traffic Signal Heads 12-Inch, 4-Section	4.000 EACH		
0568	SPV.0060 Special 48. Traffic Signal Heads 12-Inch, 5-Section	2.000 EACH		
0570	SPV.0060 Special 49. Traffic Signal Heads 16-Inch Pedestrian With Countdown	9.000 EACH		
0572	SPV.0060 Special 50. Backplates Signal Face, 3- Section 12-Inch	13.000 EACH		
0574	SPV.0060 Special 51. Backplates Signal Face, 4- Section 12-Inch	4.000 EACH		
0576	SPV.0060 Special 52. Backplates Signal Face, 5- Section, 12-Inch	2.000 EACH		
0578	SPV.0060 Special 56. Remove Base Type 10	1.000 EACH		
0580	SPV.0060 Special 57. Remove Sanitary Sewer Access Structure	13.000 EACH		·







Page 20 of 25

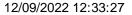
Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0582	SPV.0060 Special 58. Abandon Sanitary Sewer Access Structure	2.000 EACH		
0584	SPV.0060 Special 59. Sanitary Sewer Access Structure, 4-Foot Diameter	11.000 EACH	·	
0586	SPV.0060 Special 60. Sanitary Sewer Access Structure, 5-Foot Diameter	4.000 EACH	·	
0588	SPV.0060 Special 61. Sanitary Sewer Tap	12.000 EACH	·	
0590	SPV.0060 Special 62. Sewer Electronic Markers	121.000 EACH	·	·
0592	SPV.0060 Special 63. Sanitary Sewer Internal Chimney Seal	2.000 EACH	·	
0594	SPV.0060 Special 64. External Sewer Access Structure Joint Seal	4.000 EACH		
0596	SPV.0060 Special 65. Sanitary Lateral Reconnect	57.000 EACH		
0598	SPV.0060 Special 66. Adjusting Sanitary Sewer Manhole, Monona	3.000 EACH		
0600	SPV.0060 Special 67. Abandon Sanitary Sewer - Pipe Plug	5.000 EACH		
0602	SPV.0060 Special 68. Reconstruct Bench and Flowlines, Sanitary Sewer	2.000 EACH	·	
0604	SPV.0060 Special 69. Install Compression Coupling	3.000 EACH		
0606	SPV.0060 Special 70. Cut Off Existing Water Main	8.000 EACH		
0608	SPV.0060 Special 71. Cut-In or Connect-To Existing Water System	23.000 EACH	·	







Page 21 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0610	SPV.0060 Special 72. Abandon Water Valve Box	6.000 EACH		
0612	SPV.0060 Special 73. Abandon Water Valve Access Structure	9.000 EACH		
0614	SPV.0060 Special 74. Remove and Salvage Existing Hydrant	3.000 EACH	·	·
0616	SPV.0060 Special 75. Adjust Water Valve Box Section	23.000 EACH	·	·
0618	SPV.0060 Special 76. Furnish & Install 6-Inch Valve	5.000 EACH		<u> </u>
0620	SPV.0060 Special 77. Furnish & Install 8-Inch Valve	4.000 EACH		<u> </u>
0622	SPV.0060 Special 78. Furnish & Install 10-Inch Valve	7.000 EACH		
0624	SPV.0060 Special 79. Furnish and Install Hydrant	3.000 EACH		
0626	SPV.0060 Special 80. Relocate Water Service	19.000 EACH		
0628	SPV.0060 Special 81. Remove and Salvage Drinking Fountain	1.000 EACH	·	·
0630	SPV.0060 Special 82. Drinking Fountain	1.000 EACH		
0632	SPV.0060 Special 83. Remove, Salvage, and Reinstall Boulder Retaining Wall	1.000 EACH	·	·
0634	SPV.0060 Special 84. Adjust Curb Box	24.000 EACH		
0636	SPV.0060 Special 85. Relocate Hydrant	1.000 EACH		
0638	SPV.0060 Special 86. Inlet Covers Madison Special	2.000 EACH		<u> </u>







Page 22 of 25

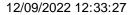
Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0640	SPV.0060 Special 87. Temporary Lighting	1.000 EACH	·	
0642	SPV.0060 Special 88. Optical Signal Preempt	1.000 EACH		
0644	SPV.0060 Special 89. Temporary Traffic Signals Atwood Avenue - Walter Street	1.000 EACH	<u>-</u>	
0646	SPV.0060 Special 90. Temporary Traffic Signals Atwood Avenue - Cottage Grove Road	1.000 EACH		
0648	SPV.0060 Special 91. Wastewater Control 150 GPM	1.000 EACH		<u>.</u>
0650	SPV.0060 Special 92. Remove, Salvage, and Reinstall Riprap Heavy	1.000 EACH	·	
0652	SPV.0060 Special 93. Construction Staking Sanitary Sewer	1.000 EACH		
0654	SPV.0060 Special 94. Construction Staking Water Main	1.000 EACH	·	
0656	SPV.0060 Special 95. Temporary Overhead Fiber Optic	1.000 EACH	·	
0658	SPV.0085 Special 01. Shortgrass Prairie Seed Mix	3.300 LB		
0660	SPV.0090 Special 01. Railing Pedestrian Steel B- 13-864	48.000 LF		·
0662	SPV.0090 Special 02. Concrete Curb & Gutter 24- Inch Type D Special	14,184.000 LF		
0664	SPV.0090 Special 03. Concrete Curb & Gutter 30- Inch Type D Special	1,136.000 LF		
0666	SPV.0090 Special 04. Concrete Curb & Gutter 24- Inch Type D Special HF	445.000 LF	·	







Page 23 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0668	SPV.0090 Special 05. Concrete Curb & Gutter 30- Inch Type D Special HF	25.000 LF	·	
0670	SPV.0090 Special 06. Concrete Curb & Gutter 24- Inch Type X Special	56.000 LF		
0672	SPV.0090 Special 07. Concrete Curb & Gutter 24- Inch Type A Special	144.000 LF		
0674	SPV.0090 Special 08. Concrete Curb & Gutter 30- Inch Type A Special	30.000 LF		
0676	SPV.0090 Special 09. Concrete Curb & Gutter Type Special Parking Lot	5.000 LF	<u></u>	
0678	SPV.0090 Special 10. Concrete Gutter 24-Inch Type D Special	25.000 LF		·
0680	SPV.0090 Special 12. Reflective Sign Post	613.000 LF		
0682	SPV.0090 Special 13. Marking Line Epoxy 6-Inch	3,205.000 LF		·
0684	SPV.0090 Special 14. Marking Crosswalk Epoxy Ladder Pattern 18-Inch	898.000 LF		·
0686	SPV.0090 Special 15. Marking Stop Line Epoxy 24- Inch	333.000 LF		
0688	SPV.0090 Special 16. Electrical Wire Lighting, 14-3 Grounded	2,885.000 LF		
0690	SPV.0090 Special 17. Loop Detector Lead-In Cable Special	6,224.000 LF		
0692	SPV.0090 Special 18. Fiber Optic Cable 24-Count	1,320.000 LF		
0694	SPV.0090 Special 19. Fiber Optic Cable 144-Count	6,959.000 LF		







Page 24 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, N/A

SECTION: 0001 Contract Items

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price	Bid Amount
0696	SPV.0090 Special 20. Staking Temporary Pavement	4,000.000 LF		
0698	SPV.0090 Special 21. Sanitary Sewer Pipe PVC, 8-Inch	2,484.000 LF		·
0700	SPV.0090 Special 22. Sanitary Sewer Lateral	1,391.000 LF	·	
0702	SPV.0090 Special 23. Remove Sanitary Sewer Pipe	216.000 LF		
0704	SPV.0090 Special 24. Select Fill for Sanitary Sewer	3,875.000 LF		
0706	SPV.0090 Special 25. Utility Trench Patch Type III	52.000 LF		
0708	SPV.0090 Special 26. Sanitary Sewer Lining	705.000 LF		
0710	SPV.0090 Special 27. Furnish & Install 6-Inch Pipe & Fittings	124.000 LF		
0712	SPV.0090 Special 28. Furnish & Install 8-Inch Pipe & Fittings	252.000 LF		·
0714	SPV.0090 Special 29. Furnish & Install 10-Inch Pipe & Fittings	377.000 LF		
0716	SPV.0090 Special 30. Furnish & Install 12-Inch Pipe & Fittings	50.000 LF	·	
0718	SPV.0090 Special 31. Sawed in Bicycle Loop Detection	1,488.000 LF		
0720	SPV.0090 Special 32. Thermoplastic Retroreflective Pavement Marking, 4-Inch	160.000 LF	·	
0722	SPV.0090 Special 33. Thermoplastic Retroreflective Pavement Marking, 6-Inch	662.000 LF		



Page 25 of 25

Proposal ID: 20221213013 Project(s): 5992-10-16, 5992-10-17, 5992-10-18

Federal ID(s): WISC 2023094, WISC 2023095, 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
0724	SPV.0165 Special 01. Wall Modular Block Gravity R-13-336	770.000 SF		·
0726	SPV.0165 Special 02. Cut-Stone Boulders	476.000 SF		·
0728	SPV.0165 Special 03. High Friction Colored Surface, Green	5,670.000 SF		
0730	SPV.0170 Special 01. Pavement Cleanup	79.000 STA		
0732	SPV.0180 Special 01. Raised Concrete Crosswalk	176.000 SY		
0734	SPV.0180 Special 02. Shredded Hardwood Bark Mulch	915.000 SY		
0736	SPV.0180 Special 03. Planting Mix Topsoil	915.000 SY		
0738	SPV.0200 Special 01. Construct Inside Drop, 6-Inch	5.520 VF		
0740	SPV.0200 Special 02. Construct Inside Drop, 8-Inch	13.490 VF		
0742	SPV.0060 Special 96. Remove, Salvage, and Reinstall Electrical Service Meter Breaker Pedestal	2.000 EACH		
0744	511.1100 Temporary Shoring	560.000 SF	·	·
	Section: 000	1	Total:	<u> </u>

Total Bid:



Wisconsin Department of Transportation

December 12, 2022

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

5992-10-17, WISC 2023 094 C of Madison, Atwood Avenue

Fair Oaks Avenue - Cottage

Grove Road

Local Street Dane County

NOTICE TO ALL CONTRACTORS:

Proposal #13: 5992-10-16, WISC 2023 094

C of Madison, Atwood Avenue Fair Oaks Avenue – Cottage

Grove Road Local Street Dane County

5992-10-18

C of Madison, Atwood Avenue Fair Oaks Avenue – Cottage

Grove Road Local Street Dane County

Letting of December 13, 2022

This is Addendum No. 04, which provides for the following:

Special Provisions:

Revised Special Provisions				
Article No.		Description		
6	Utilities			

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. 04

5992-10-16/17/18

December 12, 2022

Special Provisions

6. Utilities.

Replace entire section titled Madison Gas and Electric – Gas with the following:

Madison Gas and Electric - Gas

Existing Facilities

Buried gas facilities run along the northern terrace between Fair Oaks Avenue and Oakridge Avenue. Facilities are 4" diameter plastic between Fair Oaks Avenue and Ludington Avenue. Between Ludington Avenue and the Starkweather Creek is primarily 2-4" plastic.

Buried gas bisects Olbrich Park between Lakeland Avenue and the Starkweather Creek. The gas crosses the Starkweather Creek where it runs parallel to Atwood Avenue between the creek and Walter Street. The gas facility cuts across the parking lot and connects back to Atwood Avenue at Dennett Drive. The gas main that crosses through Olbrich Park across the Starkweather Creek towards Walter Street and Dennett Drive is a 12" High Pressure (HP) gas main and is approximately 4' deep.

Between Walter Street and Cottage Grove Road, gas facilities run beneath the westbound travel lanes. Additional gas facilities extend north on Walter Street.

Conflicts are anticipated between MGE-Gas facilities and storm sewer facilities throughout the project corridor.

Facility Improvements Prior to Construction

Relocations anticipated to prior to construction

New 6-inch gas main from approximately STA 66+90 LT to Davidson Street.

Facility Improvements During Construction

Relocations as listed below in Stage 2A and 2B will take place concurrently and the work will be completed necessary to proceed to Stage 3 as shown in the plans and as described in the "Traffic" section of the special provisions.

Relocations during Stage 2A

- New 12-inch steel high-pressure gas main offsets around proposed catch basins from approximately STA 51+20 to STA 62+00. Also, an offset will be needed at storm sewer pipe P7-20. MG&E may need supplemental traffic control to complete our work during this stage.
- New 6-inch gas main crossing near STA 46+60.
- New 6-inch gas main from STA 650+50 RT to STA 652+72 RT.
- This work will take approximately 40 work days

Relocations during Stage 2A & 2B

- New 6-inch gas main from approximately STA 11+00 LT to STA 24+38 LT, crossing at STA 24+38, from STA 24+38 RT to STA 50+90 RT.
- New 4-inch gas main from approximately STA 12+40 RT to STA 15+80 RT.
- New 2-inch gas main from approximately STA 16+30 RT to STA 20+35 RT.
- Existing services will be connected to new gas main for locations noted above (Stage 2A & 2B).
- This work will take approximately 35 work days

Relocations during Stage 2B

• New 6-inch gas main crossing at STA 50+90, from 76.5' RT to 3' LT.

- New 12-inch steel high-pressure gas main window needed at storm crossing at STA 52+20
- New 2-inch gas main from approximately STA 58+50 RT to STA 61+32 RT, crossing at STA 60+93 and connect to existing gas main.
- New service crossings at approximately STA 64+48, STA 65+08 and connect to existing gas main.
- This work will take approximately 30 work days

Relocations as listed below in Stage 3A will take place concurrently and the work will be completed necessary to proceed to Stage 3B as shown in the plans and as described in the "Traffic" section of the special provisions.

Relocations during Stage 3A

- New 6-inch gas main crossing at STA 50+90 from 3' LT to 38' LT, from STA 50+90 LT to STA 66+91 LT.
- New 6-inch gas main crossing Dennett Drive, Margaret Street, and Olbrich Avenue.
- New 12-inch high-pressure gas main from STA 101+47 LT to STA 101+72 LT.
- Existing services will be connected to new gas main for locations noted above (Stage 3A).
- This work will take approximately 40 work days

Existing gas main will be discontinued in place. New gas main will be installed a minimum of 36" below final grades.

Existing 12-inch steel high pressure gas main will remain in place from Dennett Drive to Cottage Grove Road (STA 52+16 to STA 68+11). To resolve the storm conflicts, offsets below the catchbasins will be installed. The road contractor will be exposing the top portion of the 12" steel high-pressure gas main during the subgrade excavation. The road contractor shall use caution when digging around the 12" steel high-pressure gas main and avoid continuous loading on the 12" steel high-pressure gas main during backfilling and curb installation operations. MG&E watchdog will work with contractor as they expose and dig around the 12" steel high-pressure gas main. MG&E will also provide rock-shield protection when the 12" steel high-pressure gas main is exposed.

MG&E requests the sanitary sewer be abandoned in place to avoid conflict with gas main from STA 50+10 LT to STA 64+59. MG&E requests the storm sewer for P7-21, P7.2A, P7-17, & P7-24 be completed in Stage 3A to accommodate gas main relocation work.

Stations and offsets listed above are approximate and may change during coordination with roadway contractor during construction.

END OF ADDENDUM