HIGHWAY WORK PROPOSAL

Proposal Number: 1 1

Wisconsin Department of Transportation
DT1502 10/2010 s.66.29(7) Wis. Stats.

COUNTY	STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	HIGHWAY
Rock	5990-01-20	WISC 2015 121	City of Janesville, Main Street, St. Lawrence Avenue to Centerway	Local Street
Rock	5990-01-21		City of Janesville, Main Street, St. Lawrence Avenue to Centerway	Local Street

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

Proposal Guaranty Required, $ 75,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: March 10, 2015 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code **SAMPLE** **NOT FOR BIDDING PURPOSES**
Contract Completion Time October 15, 2015	
Assigned Disadvantaged Business Enterprise Goal 13 %	This contract is exempt from federal oversight.

This certifies that the undersigned bidder, duly sworn, is an authorized representative of the firm named above; that the bidder has examined and carefully prepared the bid from the plans, Highway Work Proposal, and all addenda, and has checked the same in detail before submitting this proposal or bid; and that the bidder or agents, officer, or employees have not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal bid.

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

Subscribed and sworn to before me this date _____

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

(Bidder Signature)

(Print or Type Bidder Name)

(Bidder Title)

For Department Use Only

Type of Work Removing asphaltic surface milling, base aggregate, HMA pavement, pavement marking, permanent signing, storm sewer, concrete curb and gutter, concrete sidewalk, landscaping, traffic signals, street lights, and water main.	
Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH
PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2007 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

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

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

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

(5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.

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

B Submitting Electronic Bids

B.1 On the Internet

(1) Do the following before submitting the bid:

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

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

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

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

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

(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 **http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm**. Use Expedite ™ software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express™ web site to assure that the schedule of items is prepared properly.

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

Bidder Name

BN00

Proposals: 1, 12, 14, & 22

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

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

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

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

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

C Waiver of Electronic Submittal

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

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

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

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

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

PROPOSAL BID BOND

Wisconsin Department of Transportation

DT1303 1/2006

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

(Signature of Attorney-in-Fact)

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

Wisconsin Department of Transportation

DT1305 8/2003

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

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

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

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

(Signature of Authorized Contractor Representative) (Date)

March 2010

LIST OF SUBCONTRACTORS

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

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

Name of Subcontractor	Class of Work	Estimated Value

DECEMBER 2000

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

Instructions for Certification

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Special Provisions

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 5990-01-20 and 5990-01-21, City of Janesville, Main Street, St. Lawrence Avenue to Centerway, Local Street, Rock 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, 2015 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.
100-005 (20140630)

2. Scope of Work.

The work under this contract shall consist of removing asphaltic surface milling, base aggregate, HMA pavement, pavement marking, permanent signing, storm sewer, concrete curb and gutter, concrete sidewalk, landscaping, traffic signals, street lights, water main and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.
104-005 (20090901)

3. Prosecution and Progress.

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

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

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

Do not begin construction until on or after May 26, 2015, unless approved by the engineer.

The contract completion date requires higher than normal production of materials and work efforts. Included in this "Prosecution and Progress" special provision are interim and final completion dates. These dates indicate that work efforts will possibly require multiple

or concurrent controlling operations to occur at the same time. This information is included to assist the contractor and its subcontractors and shall not be interpreted as a demonstration of specified means and methods or work periods other than interim and final completion dates.

Complete construction operations on Main Street from Milwaukee Street to Centerway (Segment 1) to the stage necessary to reopen it to through traffic prior to 12:01 AM August 1, 2015. Construction on Main Street from St. Lawrence Avenue to Milwaukee Street (Segment 2) shall not begin until Segment 1 is completed as described in this paragraph below. Do not reopen segment 1 until completing the following work: All contract items except for Trees, Perennials, Sod Lawn, and Sod Water. These contract items may be completed under traffic to accommodate material availability and weather for optimum planting conditions.

Replace standard spec 108.10.2.2(1) as follows:

(1) The engineer will award a time extension for severe weather on calendar day and completion date contracts. Submit a request for severe weather days if the number of adverse weather days, as defined in standard spec 101.3, exceeds the anticipated number of adverse weather days tabulated below.

Total Anticipated Adverse Weather Days for Each Calendar Month[2]

Jan[1]	31	Aug	6
Feb[1]	28	Sept	4
Mar[1]	31	Oct	5
April	5	Nov 1 through 15	2
May	7	Nov 16 through 30[1]	15
June	7	Dec[1]	31
July	6		

[1] Includes an anticipated winter suspension from November 16 through March 31.

[2] The number of days will be modified in the special provision for year-round and painting contracts.

If the contractor fails to complete the work necessary to reopen Main Street from Milwaukee Street to Centerway to through traffic prior to 12:01 AM August 1, 2015, the department will assess the contractor $1,000.00 in interim liquidated damages for each calendar day that the roadway remains closed after 12:01 AM, August 1, 2015. 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.

A General

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

Hold prosecution and progress meetings once per week. Invite City of Janesville representatives to attend the prosecution and progress meetings, including area EMS services. The prime contractor's superintendent or designated representative and subcontractor's representatives for ongoing subcontract work or subcontractor work expected to begin within the next two weeks shall provide a written schedule of the next week(s)' operations. Provide begin and end dates of specific prime and subcontractor work operations. Review the contractor's schedule and subcontractors' schedule, traffic control staging, and evaluation of progress and pay items and other agenda items at the meeting Review plans, schedule and specifications for upcoming work at this meeting.

Place base aggregate dense on the same day as excavation. Provide a temporary 3:1or flatter sloped wedge in areas that will have greater than a 6-inch drop for more than three calendar days. At the end of each day, place base aggregate dense to provide a ramp to the entrances.

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

The contractor is advised to mobilize construction equipment that is a size suitable for maneuvering in the limited area throughout the project. There are many movement limitations both horizontally and vertically in the project limits (trees, overhead wires, poles, etc.). The contractor shall be responsible for any damage done to objects inside the project limits.

There is a great concern from the business owners along the project regarding the amount of dust that will be present from the construction operations. Minimize the amount of dust created from construction. During construction operations, if aggregate, slurry from saw cutting, or other construction materials are in the travel way, the contractor shall immediately clean up the area.

No utility work, utility disruption, or sidewalk construction can commence in front of an entrance without notifying the property owner or business a minimum of 48 hours in advance. Utilities or entrances shall not be shut down during the business open times unless approved by the property owner, business and the engineer. Provide ADA accessible crossing during this time at these areas.

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

The project has underground sidewalk vaults that are located through the project limits. The general locations are shown in the plans. Verify the location of the vaults prior to beginning work in these areas. These vaults will be remaining in place. Take extreme care not to damage the underground vaults. The contractor will be responsible for any damage to the underground vaults.

The existing large landscaping rocks that are located at Station 105+90, RT, Station 110+90, LT, and Station 111+50, LT will be removed by the City of Janesville prior to the start of construction. Contact Dennis Ryan at (608) 755-3171 two weeks prior to the start of construction.

The existing wooden benches located in front of the building at 24 North Main Street will be removed by the City of Janesville prior to the start of construction. Contact Dennis Ryan at (608) 755-3171 two weeks prior to the start of construction.

The City of Janesville will install the new bus shelter at Station 117+45, RT once the new 6-inch concrete sidewalk is in place. Contact Dennis Ryan at (608) 755-3171 two weeks prior to the area being ready for the bus shelter placement.

Perform construction operations in a manner to maintain existing or new lighting on one side of the street through the construction project.

The existing street light conduit is located at the back side of the existing curb and gutter at six to eighteen inches below the existing grade. No extra payment will be made for working around these facilities. Take extreme care not to damage these facilities. The contractor will be responsible for any damage.

The removing asphaltic surface milling will not be allowed to occur until the water main construction is completed.

4. Traffic.

Segment 1:
Close Main Street from Milwaukee Street to Centerway to through traffic during construction. Stage the Main Street/Milwaukee Street intersection to maintain one lane of traffic on Milwaukee Street. Provide a hard surface/temporary surface for traffic on Milwaukee Street. A through vehicle traffic detour is provided. Change the traffic signals at Main Street/Milwaukee Street to be flashing yellow on Milwaukee Street and flashing red on Main Street. When the traffic signals are being replaced, place stop signs on Main Street.

Segment 2:
Close Main Street from St. Lawrence Avenue to Milwaukee Street to through traffic during construction. Stage the Main Street/Court Street and Main Street/Milwaukee Street intersections to maintain one lane of traffic on Court Street and Milwaukee Street. Provide a hard surface/temporary surface for traffic on Court Street and Milwaukee Street. A through vehicle traffic detour is provided. Change the traffic signals at Main

Street/Milwaukee Street and Main Street/Court Street to be flashing yellow on Milwaukee Street and Court Street and flashing red on Main Street. When the traffic signals are being replaced, place stop signs on Main Street.

A Notification

Notify the City of Janesville Police Department, Fire Department, Janesville Transit System, and the Post Office a minimum of 14 calendar days prior to closing Main Street.

Furnish and operate a Traffic Control Signs Portable Changeable Message Board for 10 calendar days prior to closing the segments of Main Street. Locate the Traffic Control Signs Portable Changeable Message Boards on Main Street at the north and south project limits. The message shall indicate the planned closure date for Main Street.

B Local Access-Vehicles

Maintain an accessible route for emergency vehicles at all times through the project limits. Provide vehicle access to all driveways along the project at all times unless written permission for temporary closure is provided by the engineer. Temporary closures are anticipated for storm sewer construction and concrete operations.

Provide local traffic vehicle access on a paved or compacted aggregate base course surface and of sufficient width to provide access for emergency vehicles, delivery vehicles, and refuse haulers. Use appropriate traffic control devices, including traffic control drums, warning lights, and barricades to delineate the access and protect the remainder of the worksite.

The maximum cumulative time that any business is completely without driveway access is 14 calendar days. Inform businesses a minimum of 48 hours prior to closing their driveway access. Provide proper traffic control to close driveway access and protect the worksite.

Maintain vehicle access to the driveways at Station 114+50, Lt, Station 116+10, LT, and Station 117+90, LT at all times during standard business hours. Stage construction operations, including driveway and sidewalk items, and maintain a minimum width of 12 feet for vehicle access. Notify the businesses at least three calendar days prior to making access changes.

Maintain vehicle access to the business at 100 North Main Street. Do not close the driveways at Station 114+95, RT and Station 115+35, RT at the same time.

Maintain vehicle access to the business at 301 North Main Street. Do not close the driveways at Station 119+45, LT and Station 121+35, LT at the same time.

Maintain a minimum 12-foot wide clear vehicle access between Milwaukee Street and Centerway for deliveries and garbage collection.

C Pedestrian Traffic

Maintain sidewalk on one side of the street at all times. For the other side of the street, when constructing the sidewalk, access to the buildings still needs to be maintained. Construct and open new sidewalk to pedestrian traffic within one calendar day of removing the existing sidewalk. Provide a temporary surface for pedestrian access at all times. The temporary surface shall meet Americans with Disabilities Act (ADA) requirements and may consist of the existing concrete sidewalk, plywood, temporary plates or temporary asphalt. Maintain temporary pedestrian crossings at all times at the roadway intersections. Existing curb ramps can be removed at any time as long as a Temporary Crosswalk Access is constructed and maintained.

Safety fencing, or other engineer approved method, shall guide pedestrian corridors; barrels shall not be used for pedestrian corridors. Place safety fencing a minimum of 5-feet from face of building.

5. Utilities.

This contract does not come under the provision of Administrative Rule Trans 220.
107-065 (20080501)

There are underground and overhead facilities located within the project limits. There are known utility adjustments required for the construction project as noted below. Coordinate construction activities with Diggers Hotline and directly contact the utilities, which have facilities in the area as required per statutes. Use caution to ensure the integrity of underground facilities and maintain code clearances from overhead facilities at all times.

Bidders are advised to contact each utility company listed in the plans, prior to preparing their bids, to obtain current information on the status of any utility relocation work stated herein.

Alliant Energy (gas)

Alliant Energy has buried gas mains throughout the project limits. An existing 6" high-pressure gas main runs north/south along the western sidewalk from approximately Station 100+60 to where it tees into a 6" steel high-pressure gas main at Station 104+05. The 6" steel gas main runs east/west and crosses Main Street at Station 104+05.

A 4" high-pressure steel gas main north/south across Court Street approximately 70' east of the Main Street Centerline and then continues west beneath the north sidewalk of Court Street where it bends north at Station 104+50. From Station 104+50, the 4" gas main continues north along the east side of Main Street to Station 121+60.

A 2" plastic high-pressure gas main tees into the existing 6" gas main at Station 101+35, 26' LT and runs east across Main Street along the north curb line of St. Lawrence Avenue.

A 2" steel high-pressure gas main tees into the existing 4" steel gas main at Station 109+60, 24' RT and runs west across Main Street along the north side of Milwaukee Street.

A 2” steel high-pressure gas main tees into the existing 4” steel gas main at Station 109+50, 24’ RT and runs east along the north side of Milwaukee Street.

Existing gas laterals are located at Station 102+75, LT; 102+85, LT; 103+22, LT; 103+75, LT; 105+48, LT; 105+48, RT; 105+71, LT; 105+85, RT; 105+92, LT; 106+35, LT; 107+52, LT; 107+52, RT; 107+59, LT; 107+99, LT; 108+15, RT; 109+75, RT; 110+58, LT; 110+90, LT; 111+18 LT; 111+44, LT; 111+49, RT; 111+69, LT; 111+72, LT; 111+93, RT; 112+00, LT; 112+16, LT; 112+40, RT; 114+20, LT; 114+76, LT; 115+22, LT; 115+22, RT; 115+44, LT; 115+71, LT; 116+52, LT; 118+70, RT; 121+00, LT; 121+00, RT; and 121+62, RT.

The following table provides the actions that Alliant Energy will take prior to May 15, 2015.

Location:	**Action:**
Station 100+60 to Station 104+05	Alliant will abandon existing 6” steel gas main in place and install a new 4” PVC gas main approximately 2’west of the existing 6” steel gas main. Gas main will be installed at a minimum depth of 30 inches below the proposed sidewalk elevation.
Station 104+05	Alliant will abandon the existing 6” steel gas main that runs east/west across Main Street and install a new 6” PVC gas main located 2’ north of the existing gas main. Gas main will be installed at a minimum depth of 30 inches below the proposed pavement elevations.
Station 104+05, RT to Station 121+00, RT	Alliant will abandon the existing 4” steel gas main that runs north/south along the east side of Main Street and install a new 4” PVC gas main located approximately 2’ west of the existing gas main.
109+60	Alliant will abandoned the existing 2” steel gas main runs east/west across Main Street and install a new 2” PVC gas main located approximately 2’ south of the existing gas main.

Prior to May 15, 2015 Alliant will abandoned existing gas laterals in place and a new gas lateral and gas valve will be installed at Station 102+60, LT; 102+85, LT; 103+22, LT; 103+75, LT; 105+48, LT; 105+48, RT; 105+71, LT; 105+98, RT; 105+92, LT; 106+35, LT; 107+52, LT; 107+52, RT; 107+59, LT; 107+99, LT; 108+07, RT; 109+25, RT; 110+58, LT; 110+90, LT; 111+18 LT; 111+44, LT; 111+49, RT; 111+69, LT; 111+72, LT; 111+93, RT; 112+00, LT; 112+16, LT; 112+40, RT; 114+20, LT; 114+70, LT; 115+22, LT; 115+22, RT; 115+44, LT; 115+71, LT; 116+52, LT; 118+70, RT; 121+00, LT; 121+00, RT; and 121+62, RT. Gas laterals will be installed at minimum depth of 30 inches below the proposed sidewalk and roadway elevation.

All pavement and sidewalk disturbed within the Main Street construction roadway project limits will be patched with temporary asphalt by Alliant.

Final gas valve adjustments will be made by Alliant during the Main Street construction roadway project. Contact Alliant a minimum of one week in advance of needing final gas valve adjustments.

Utility line openings have been provided to expose the existing gas main at Station 100+60, 18' RT; 101+35, 10' RT; 101+35, 20' LT; and 104+05, 40' RT.

Alliant Energy (electric)
Alliant Energy has underground 3-phase lines that cross Main Street at Station 104+00. These electrical lines are located within a 4" diameter duct and are located within a joint trench with Charter and AT&T. The duct package is a soft-shelled conduit with slurry placed over top and at an approximate depth is 24" to 30" below existing pavement elevation.

Alliant has an underground electrical service that crosses Main Street at Station 122+25. This electrical service is at an approximate depth of 30" below the existing pavement elevation.

No conflicts with existing facilities are anticipated. Alliant is not planning any upgrades to their facilities.

Utility line openings have been provided to expose the existing duct package at Station 104+00, 40' RT and Station 104+00, 45' LT.

AT&T (telecommunications)
AT&T has a buried duct package located along the west side of Main Street approximately 12 to 25 feet west of the Main Street Centerline. In general, the duct package runs along the west parking lane of Main Street; however, given the irregular geometry of Main Street, there are locations where the duct package is located beneath the curb and gutter and planter beds. This is a 4-duct package made of clay with a slurry poured over the top. Three of the four ducts are in use.

There are duct packages that run east/west that cross Main Street at Station 104+12, 109+30, 109+40, and 115+80. There is a four duct package that heads ease out of the structure at Station 122+40. Additionally, there is a duct package that connects to the structure at Station 104+45, 19' LT and runs west along the north side of Court Street.

AT&T has a telecommunication line that connects to the structure at Station 101+03, 14' LT and runs beneath the sidewalk at the southwest quadrant of Main Street and St. Lawrence Avenue and then continues west beneath the south sidewalk on St. Lawrence Avenue. AT&T runs along the south side of Court Street and crosses Main Street at Station 104+00 within a joint duct package with Charter and Alliant. This duct package is a soft-shelled conduit with slurry placed over the top. It is approximately 24" to 30" below the existing pavement surface.

AT&T has services Station 108+45, LT and 110+80, LT.

AT&T has several large utility structures located Station 101+03, 14' LT; 104+12, 20' LT; 104+45, 19' LT; 108+45, 22' LT; 109+35, 42' RT; 109+52, 21' LT; 115+80, 12' LT; and 122+40, 16' LT. Contractor shall verify the limits of the existing structures prior to installing adjacent watermain and/or storm sewer.

AT&T will provide a site representative anytime the contractor crosses over or under any of AT&T's facilities. Provide a minimum five day notice via email prior to crossing over or under AT&T's facilities.

AT&T will make any necessary adjustments to their structures during the roadway construction. Contractor to contact AT&T a minimum five day notice via email prior to needing the structures adjusted.

Prior to May 22, 2015, AT&T will be installing a new 4-duct package from the utility structure at Station 101+03, 14'LT to the structure at Station 122+40, 16' LT. The new duct package will consist of four 4" PVC conduits. The dimensions of the new duct package will be approximately 12 inches wide and 12 inches deep and will be installed with a minimum cover of 30 inches. Note that the existing duct package will remain in service. The new duct package is for future communication lines so they will not have any communication lines installed in them at this time.

In general, the new 4-duct package will be installed in the following locations:

From Station 101+03 to Station 104+12: Approximately 12' to 15' left of the roadway centerline and deflects back to connect to the existing utility structures (approximately 3' to 5' east of AT&T's existing duct package).

From Station 104+12 to Station 104+12: Approximately 20' to 22' left of the roadway centerline and connect to the existing utility structures (approximately 1' to 3' west of AT&T's existing duct package).

From Station 104+12 to Station 109+52: Approximately 16' to 20' left of the roadway centerline and deflects back to connect to the existing utility structures (approximately 3' to 5' east of AT&T's existing duct package).

From Station 109+52 to Station 115+80: Approximately 10' to 18' left of the roadway centerline (approximately 5' to 8' east of AT&T's existing duct package)

From Station 115+80 to Station 122+40: Approximately 3' to 10' left of the roadway centerline and deflects back to connect to the existing utility structures (approximately 8' east of AT&T's existing duct package).

Charter Communications (Cable TV)
Charter Communications runs along the south side of Court Street and crosses Main Street at Station 104+00 within a joint duct package with AT&T and Alliant. This is a

soft-shelled conduit with slurry poured over the top. This duct package is approximately 24” to 30” below the existing pavement surface.

Charter has facilities that cross Main Street at Station 116+65. These facilities are located within a 2” conduit. A utility pedestal is located in the terrace at Station 115+65, 25’ RT. Contractor shall provide Charter with a minimum 3 day notice prior to crossing beneath this line with watermain installation. A representative from Charter will be onsite to observe the exposed conduit at this location. At this time, Charter will evaluate the condition of the conduit and will decide whether or not to replace the conduit across the road. If replacement is necessary, the conduit replacement will be completed by Charter. Charter will require one working day to complete this work.

Windstream

Windstream has facilities that run north/south beneath the sidewalk along the east side of Main Street from Station 101+30 and Station 103+89. These facilities are at an approximate depth of 3’ to 5.5’ below the existing sidewalk elevation. There are utility vaults located at Station 101+30, 35’ RT and Station 103+89, 53’ RT.

Contractor shall contact Windstream a minimum of one week in advance of removing the existing trees along the east side of Main Street from Station 101+00 and 104+00. A representative from Windstream will need to be onsite for these removals.

Windstream will make any necessary adjustments to their utility vaults during roadway construction. Provide a minimum of one week notice to Windstream for these adjustments.

No conflicts with existing facilities are anticipated. Windstream is not planning any upgrades to their facilities.

City of Janesville (Sanitary Sewer, Water Main, Lighting)

Sanitary Sewer

Sanitary sewer is located throughout the project limits. A 27” sanitary sewer runs along the west travel lane from St. Lawrence to a manhole at Station 109+48. A 24” sanitary sewer runs north out of the manhole at Station 109+48 and along the west travel lane of Main Street to a manhole located at Station 116+00. From the manhole at Station 116+00 a 20” sanitary sewer runs north to Centerway.

A parallel 36” diameter sanitary sewer runs north/south from a manhole at Station 109+30, 44’ LT to Centerway. In general, this sanitary sewer main runs beneath the west parking lane and terrace/sidewalk areas.

An 8” sanitary sewer runs east along St. Lawrence from the sanitary manhole located at Station 101+00, 7’ LT. A 8” sanitary sewer mains run east and west along Court from the sanitary manhole at Station 104+36, 7’ LT. An 8” sanitary sewer main runs east along Milwaukee Street from the manhole at Station 109+48, 7’ LT. A 36” sanitary sewer runs west along Milwaukee Street from the manhole at Station 109+30, 44’ LT. An 8” sanitary

sewer runs east along Wall Street from the sanitary manhole at Station 112+61, 12' LT. A 24" sanitary sewer runs east from the sanitary sewer at Station 116+00, 7' LT. An 8" sanitary sewer runs east along Pease Court from the sanitary manhole at Station 119+30, 13' LT.

There are sanitary sewer manholes located at Station 101+00, 7' LT; Station 104+36, 7' LT; Station 106+88, 6' LT; Station 109+30, 44' LT; Station 109+48, 7' LT; Station 112+61, 12' LT; Station 112+72, 25' LT; Station 116+00, 7' LT; Station 117+41, 7' LT; Station 117+65, 16' LT; Station 119+30, 13' LT; Station 122+55, 26' LT; and Station 122+54, 12' LT. Sanitary sewer laterals extend from the sanitary sewer mains to the face of the buildings throughout the project.

The city or city's contractor plans to complete some sanitary sewer manhole rehabilitation work during this project. The rehabilitation work will involve rebuilding chimney sections, along with trenchless methods to repair remaining sections of these manholes. Minor excavation is anticipated around the perimeter of the manhole; however, the city's contractor will patch any pavement disturbed as a result of their work. The pavement patch will consist of an approximate 4'x4' area to complete this work. The sanitary manhole rehabilitation work will occur at the following locations: Station 101+00, 7' LT; Station 106+88, 6' LT; Station 109+48, 7' LT; Station 112+61, 12' LT; Station 116+00, 7' LT; and Station 117+41, 7' LT. Provide the city a one week notice prior to installing traffic control for each stage. The city will require one work day for each sanitary manhole to be rehabilitated.

Water Main

Watermain is located throughout the project. A 10" watermain runs north/south along the east side of Main Street from St. Lawrence to Station 115+00. An 8" watermain runs north/south along the east side of Main Street from Station 115+00 to Centerway.

Water manholes are located at Station 110+67, 14' RT; Station 101+09, 22' RT; Station 101+09, 55' RT; Station 101+10, 32' LT; Station 102+55, 14' RT; Station 101+42, 43' LT; Station 104+45, 19' RT; Station 106+75, 18' RT; Station 109+04, 17' RT; Station 109+44, 37' RT; Station 110+52, 18' RT; Station 112+85, 18' RT; Station 116+33, 17' RT; Station 117+82, 17' RT; Station 117+91, 17' RT; and Station 119+40, 10' RT.

Proposed watermain replacement work is included as part of this contract.

Electric

The City of Janesville has existing light poles located in the terrace from St. Lawrence to Centerway. In general, existing electrical lines connecting light poles are expected to be shallow.

Prior to construction, the city will install an electrical service, street light control cabinet, and meter breaker pedestal behind the sidewalk at Station 106+50, RT. The city will install conduit from the control cabinet to the back of sidewalk. This control cabinet will be the

service for the street lighting. Contact Dave Lou, City of Janesville at (608) 373-3407 a minimum of two weeks prior to completing this work.

Prior to construction, the city will install an electrical service and meter breaker pedestal behind the sidewalk at approximately Station 103+37, RT. This electrical service will be used to serve the proposed traffic signal cabinet at the southeast quadrant of Main and Court Street. The installation of conduit and wiring from the meter break pedestal to the traffic control cabinet will be part of this DOT roadway project. Contact Dave Lou a minimum of two weeks prior to completing this work.

Prior to construction, the city will install an electrical service behind the sidewalk at Station 111+24, RT. The city will install a conduit from the control cabinet to the back of sidewalk. This electrical service will be used to serve the proposed traffic signal cabinet at the northeast quadrant of Main and Milwaukee. The installation of conduit and wiring from the meter break pedestal to the traffic control cabinet will be part of this DOT roadway project. Contact Dave Lou a minimum of two weeks prior to completing this work.

Proposed street lighting work is included as part of this contract. The city place the following street lights on a separate circuit from the street lights along Main Street in the following locations: East leg of Court Street, pedestrian level lighting in Fireman's Park, and lighting along the east leg of Pease Court. Contact Dave Lou, City of Janesville a minimum of two weeks prior to needing the lighting abandoned to separate circuits.

The contractor shall stage construction to maintain existing and proposed pedestrian and street lighting on at least one side of the. Temporary connections may be necessary to maintain service. If existing wiring is damaged during excavation, make a temporary repair until the new conduit and wiring is installed. Temporary connections are included in the work associated with street lights. Contact Dave Lou a minimum of two weeks prior to start of construction for coordination of maintaining street lighting during construction.

6. Hauling Restrictions.

At all times, conduct operations in a manner that will cause a minimum of inconvenience to the free flow of traffic. Hauling vehicles shall only use engineer-approved ingress and egress locations. Use only City of Janesville designated truck routes for material haul roads.

Equip all vehicles traveling on public roads that are hauling materials or removals and are subject to spillage, by either wind or vibration, with tailgates and adequate sideboards. Use canvas covers and any other protective devices to prevent spillage as determined necessary by the engineer. Comply with all local ordinances.

7. Public Convenience and Safety.

Revise standard spec 107.8(6) as follows:

Check for and comply with local ordinances governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 7:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer.
107-001 (20060512)

8. 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.

9. Preservation of Existing Trees.

Tree preservation is of great importance on the project. 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, reinstates, 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.

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 ½-inch in diameter in back of the damaged section. Make cuts with an ax, 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.

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 of Janesville Parks Department.

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.

Sidewalk Removal and Replacement
Provide extra care to root masses that grow very close to the sidewalk during excavation.

Terrace Restoration
Do not mechanically grade within 5 feet of any tree. If in the root protection zone, do grading 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 Existing Tree 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 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 will have a minimum caliper of 3 inches. The species and replanting location will be determined by the city Parks Department.
- 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:

1. The costs associated with pruning broken branches, including wood disposal.
2. 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 will be reviewed on a case by case basis.
3. 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:

1. 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 Parks Department: $150.00 for each occurrence.
2. 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.

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

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

11. General Requirements for Sanitary Sewer and Water.

Perform work in accordance to these provisions, the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction and the "City of Janesville, Wisconsin Standard Specifications for Public Works Construction". In the event of a conflict, the Wisconsin Department of Transportation Standard Specifications will take precedence.

An electronic copy of the "City of Janesville, Wisconsin Standard Specifications for Public Works Construction" is available for online view at http://www.ci.janesville.wi.us/modules/showdocument.aspx?documentid=2217.

12. Notice to Contractor – Contamination Beyond Construction Limits.

The department completed testing for soil and ground water contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following site(s):

1. Behind the sidewalk at address 111 North Main Street at depths of 6 to 10 feet below grade with soil contaminated by polycyclic aromatic hydrocarbons (PAH). Located from Station 113+25 to 114+75 at 38 feet LT of centerline to 120 feet LT of centerline.
2. Behind the sidewalk and at excavation depths greater than 7 feet at address 301 North Main Street. Located from Station 119+65 to 122+25 at 43 feet LT of centerline to 120 feet LT of centerline

The contaminated soils at the above sites are expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations at these locations to ensure that they do not extend beyond the excavation limits indicated in the plans. If contaminated soils are encountered at these sites or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer.

The Hazardous Materials Report is available by contacting: Brad Reents, MSA Professional Services, Inc., 2901 International Lane, Suite 300, Madison, WI 53704, (608) 242-7779.
107-100 (20050901)

13. Coordination with Businesses.

The contractor shall arrange and conduct a meeting between the contractor, the department, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting prior to the start of work under this contract and hold two meetings per month thereafter.
108-060 (20030820)

14. Removing Concrete Sidewalk.

Supplement standard spec 204 with the following:

Removal of the concrete sidewalk where buildings and vaults abut the concrete sidewalk shall include performing a full depth sawcut approximately 1-foot from the vaults or buildings or as close as possible to the vaults or buildings. Remove the remaining pieces of sidewalk by the vaults or buildings by other methods. Payment of the full depth sawcut will be paid for under the bid item Sawing Concrete. During the sawcutting and sidewalk removal the contractor shall take extreme care to not damage the vaults or buildings. The contractor will be responsible for any damage to the vaults or buildings. Salvage rebars that extend into the sidewalk from the vaults or buildings and incorporate into the new concrete sidewalk. Place 1"of joint filler along the vault or building or remaining sidewalk. The joint filler is included in the bid item Concrete Sidewalk.

Removal of the concrete sidewalk where bricks, that are to remain in place, abut the concrete sidewalk includes reinstalling any of the bricks disturbed or moved during removal of existing sidewalk or placement of the new sidewalk. During the sidewalk removal and new sidewalk placement take extreme care to not damage the brick. The contractor will be responsible for any damage to the brick.

15. Removing Luminaire And Mast Arm, Item 204.9060.S.01.

A Description
This special provision describes removing the luminaire and mast arm from existing roadway light poles.

B (Vacant)

C Construction
Remove the existing luminaire and mast arm from the existing roadway poles specified in the plans. Store the luminaires and mast arms off the project site for City of Janesville pickup. Contact Dave Lou at (608) 751-0522 three calendar days prior to removal.

D Measurement
The department will measure Removing Luminaire and Mast Arm by each individual unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.01	Removing Luminaire and Mast Arm	Each

Payment is full compensation for disassembling, removing, including disposal of all materials and storage.

16. Removing Overhead Sign Support, Item 204.9060.S.02.

A Description
This special provision describes the removing of overhead sign supports at the location shown in the plans.

B (Vacant)

C Construction
Carefully remove overhead sign supports, backfill the resulting holes, and dispose of all materials outside of the right-of-way in accordance to standard specs 204 and 638.3. Store the overhead sign supports off the project site for City of Janesville pickup. Contract Dennis Ryan at 608-755-3171 least three working days prior to removal.

D Measurement
The department will measure Removing Overhead Sign Support, Station 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
204.9060.S.02	Removing Overhead Sign Supports,	Each

Payment is full compensation for disassembling, removing, including disposal of all materials and storage.

17. Remove Roadway Light Pole, Item 204.9060.S.03.

A Description
This special provision describes removing and salvaging existing roadway light poles.

B (Vacant)

C Construction
Remove and salvage the existing concrete light poles as specified in the plans. Store the concrete light poles off the project site for City of Janesville pickup. Contact Dave Lou at (608) 373-3407 three calendar days prior to removing the light poles.

D Measurement
The department will measure Remove Roadway Light Pole by each individual unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.03	Remove Roadway Light Pole	Each

Payment is full compensation for disassembling, removing, including disposal of all materials and storage.

18. Removing Wall Mounted Benches, Item 204.9060.S.04.

A Description
This special provision describes the removing of wall mounted benches at the location shown in the plans.

B (Vacant)

C Construction
Carefully remove wall mounted benches, patch the resulting holes, and dispose of all materials outside of the right-of-way in accordance to standard spec 204. Store the wall mounted benches off the project site for City of Janesville pickup. Contract Dennis Ryan at (608) 755-3171 at least three working days prior to removal.

D Measurement
The department will measure Removing Wall Mounted Benches, 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
204.9060.S.04	Removing Wall Mounted Benches	Each

Payment is full compensation for disassembling, removing, including disposal of all materials and storage.

19. Removing Median Planters, Item 204.9060.S.05.

A Description
This special provision describes the removing of median planters at the location shown in the plans.

B (Vacant)

C Construction
Carefully remove median planters and dispose of all materials outside of the right-of-way in accordance to Section 204 of the Standard Specifications. Store the median planters off the project site for City of Janesville pickup. Contract Dennis Ryan at (608) 755-3171 at least three working days prior to removal.

D Measurement
The department will measure Removing Median Planters, 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
204.9060.S.05	Removing Median Planters	Each

Payment is full compensation for disassembling, removing, including disposal of all materials and storage.

20. Removing Precast Parking Curb, Item 204.9060.S.06.

A Description
This special provision describes the removing of precast parking curb at the location shown in the plans.

B (Vacant)

C Construction
Carefully remove precast parking curb and salvage all materials outside of the right-of-way in accordance to standard spec 204. Store the precast parking curbs on the Schlueter property at 301 N Main Street. Contract Dennis Ryan at (608) 755-3171 at least three working days prior to removal.

D Measurement
The department will measure Removing Precast Parking Curb, 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
204.9060.S.06	Removing Precast Parking Curb	Each

Payment is full compensation for disassembling, removing, and salvage of all materials and storage.

21. Removing Transit Stop Shelter, Item 204.9060.S.07.

A Description
This special provision describes the removing of transit bus shelter at the location shown in the plans.

B (Vacant)

C Construction
Carefully remove transit stop shelter, backfill the resulting holes, and dispose of all materials outside of the right-of-way in accordance to standard spec 204. Store the transit stop shelter off the project site for City of Janesville pickup. Contract Dennis Ryan at (608) 755-3171 least three working days prior to removal.

D Measurement
The department will measure Removing Transit Stop Shelter 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
204.9060.S.07	Removing Transit Stop Shelter	Each

Payment is full compensation for disassembling, removing, including disposal of all materials and storage.

22. Removing Cigarette Urn, Item 204.9060.S.08.

A Description
This special provision describes the removing of cigarette urn at the location shown in the plans.

B (Vacant)

C Construction
Carefully remove the cigarette urn, and dispose of all materials outside of the right-of-way in accordance to standard spec 204. Store the cigarette urn off the project site for City of Janesville pickup. Contract Dennis Ryan at (608) 755-3171 least three working days prior to removal.

D Measurement
The department will measure Removing Cigarette Urn 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
204.9060.S.08	Removing Cigarette Urn	Each

Payment is full compensation for disassembling, removing, including disposal of all materials and storage.

23. Removing Pedestrian Flasher, Item 204.9105.S.01.

A Description
This special provision describes removing the existing mid-block pedestrian flasher equipment in accordance to the pertinent provisions of standard spec 204 and as hereinafter provided.

B (Vacant)

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

Notify Dave Lou at the City of Janesville at (608) 373-3407 at least three working days prior to the removal of the equipment to coordinate pick up of existing equipment. Complete the removal work as soon as possible following shut down of this equipment.

Remove all poles and pedestal bases from their concrete footings and disassemble out of traffic. Remove the transformer or pedestal bases from each pole. Remove the signals heads, signs, buttons, wiring/cabling and mounting devices from each pole. Ensure that access handhole doors and hardware remain intact. Dispose of the underground signal cable, street lighting cable, detector lead-in cable and all wires, including loop wire.

D Measurement
The department will measure Removing Pedestrian Flasher as a single complete lump sum unit of work, acceptably completed.

E Payment
Supplement standard spec 204.5 to include the following:

ITEM NUMBER	DESCRIPTION	UNIT
204.9105.S.01	Removing Pedestrian Flasher	LS

24. QMP Base Aggregate.

A Description
A.1 General
(1) This special provision describes contractor quality control (QC) sampling and testing for base aggregates, documenting those test results, and documenting related production and placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.

(2) Conform to standard spec 301, standard spec 305, and standard spec 310 as modified here in this special provision. Apply this special provision to material placed under all of the Base Aggregate Dense and Base Aggregate Open Graded bid items, except do not apply this special provision to material classified as reclaimed asphaltic pavement placed under the Base Aggregate Dense bid items.

(3) Do not apply this special provision to material placed under the Aggregate Detours, Salvaged Asphaltic Pavement Base, Breaker Run, Select Crushed, Pit Run, Subbase, or Riprap bid items.

(4) Provide and maintain a quality control program, defined as all activities related to and documentation of the following:
1. Production and placement control and inspection.
2. Material sampling and testing.

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

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

A.2 Contractor Testing for Small Quantities

(1) The department defines a small quantity, for each individual Base Aggregate bid item, as a plan quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.

(2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:
1. The contractor need not submit a full quality control plan but shall provide an organizational chart to the engineer including names, telephone numbers, and current certifications of all persons involved in the quality control program for material under affected bid items.
2. Divide the aggregate into uniformly sized sublots for testing as follows:

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

[1] If using production tests for acceptance, submit test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.

[2] For 3-inch material, obtain samples at load-out.

[3] If the actual quantity overruns 9000 tons, create overrun sublots to test at a rate of one additional placement test for each 3000 tons, or fraction of 3000 tons, of overrun.

3. No control charts are required. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.
4. Department verification testing is optional for quantities of 6000 tons or less.

(3) Material represented by a sublot with any property outside the specification limits is nonconforming. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

B Materials

B.1 Quality Control Plan

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

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

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.
5. Descriptions of stockpiling and hauling methods.
6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

B.2 Personnel

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

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

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

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

B.3 Laboratory

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

Materials Management Section
3502 Kinsman Blvd.
Madison, WI 53704
Telephone: (608) 246-5388
http://www.dot.state.wi.us/business/engrserv/lab-qualification.htm

B.4 Quality Control Documentation

B.4.1 General

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

B.4.2 Records

(1) Document all placement observations, inspection records, and control adjustments daily in a permanent field record. Also include all test results in the project records. Provide test results to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute tabulated results using a method mutually agreeable to the engineer and contractor.

B.4.3 Control Charts

(1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.

(2) Provide control charts to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:
   1. Contractor individual QC tests.
   2. Department QV tests.
   3. Department IA tests.
   4. Four-point running average of the QC tests.

(3) Except as specified under B.8.2.1 for nonconforming QV tests, include only QC tests in the running average. The contractor may plot process control or informational tests on control charts, but do not include these tests, conforming QV tests, or IA tests in the running average.

B.5 Contractor Testing

(1) Test gradation, fracture, liquid limit and plasticity index during placement for each base aggregate size, source or classification, and type.

(2) Test gradation once per 3000 tons of material placed. Determine random sample locations and provide those sample locations to the engineer. Obtain samples after the material has been bladed, mixed, and shaped but before compacting; except collect 3-inch samples from the stockpile at load-out. Do not sample from material used to maintain local traffic or from areas of temporary base that will not have an overlying pavement. On days when placing only material used to maintain local traffic or only temporary base that will not have an overlying pavement, no placement testing is required.

(3) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for 7 calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.

(4) The engineer may require additional sampling and testing to evaluate suspect material or the technician's sampling and testing procedures.

(5) Test fracture for each gradation test until the fracture running average is above the lower warning limit. Subsequently, the contractor may reduce the frequency to one test per 10 gradation tests if the fracture running average remains above the warning limit.

(6) Test the liquid limit and plasticity index for the first gradation test. Subsequently, test the liquid limit and plasticity index a minimum of once per 10 gradation tests.

B.6 Test Methods

B.6.1 Gradation

(1) Test gradation using a washed analysis conforming to the following as modified in CMM 8.60:
Gradation..... AASHTO T 27
Material finer than the No. 200 sieve..... AASHTO T 11

(2) For 3-inch base, if 3 consecutive running average points for the percent passing the No. 200 sieve are 8.5 percent or less, the contractor may use an unwashed analysis. Wash at least one sample out of 10. If a single running average for the percent passing the No. 200 sieve exceeds 8.5 percent, resume washed analyses until 3 consecutive running average points are again 8.5 percent passing or less.

(3) Maintain a separate control chart for each sieve size specified in standard spec 305 or standard spec 310 for each base aggregate size, source or classification, and type. Set control and warning limits based on the standard specification gradation limits as follows:

1. Control limits are at the upper and lower specification limits.
2. There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.
3. Dense graded warning limits, except for the No. 200 sieve, are 2 percent within the upper and lower control limits. Warning limits for the No. 200 sieve are set 0.5 percent within the upper and lower control limits.
4. Open graded warning limits for the 1-inch, 3/8-inch, and No. 4 sieves are 2 percent within the upper and lower control limits. Upper warning limits for the No. 10, No. 40, and No. 200 sieves are 1 percent inside the upper control limit.

B.6.2 Fracture

(1) Test fracture conforming to CMM 8.60. The engineer will waive fractured particle testing on quarried stone.

(2) Maintain a separate fracture control chart for each base aggregate size, source or classification, and type. Set the lower control limit at the contract specification limit, either specified in another special provision or in table 301-2 of standard spec 301.2.4.5. Set the lower warning limit 2 percent above the lower control limit. There are no upper limits.

B.6.3 Liquid Limit and Plasticity

(1) Test the liquid limit and plasticity according to AASHTO T 89 and T 90.

(2) Ensure the material conforms to the limits specified in standard spec table 301-2.

B.7 Corrective Action

B.7.1 General

(1) Consider corrective action when the running average trends toward a warning limit. Take corrective action if an individual test exceeds the contract specification limit. Document all corrective actions both in the project records and on the appropriate control chart.

B.7.2 Placement Corrective Action

(1) Do not blend additional material on the roadbed to correct gradation problems.

(2) Notify the engineer whenever the running average exceeds a warning limit. When 2 consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:

1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
2. For fracture, increase the QC testing frequency to at least one test per gradation test.

(3) If corrective action improves the property in question such that the running average after 4 additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after 4 additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.

(4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.

(5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:

1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
3. The fracture control limit is exceeded by more than 10.0 percent.

B.8 Department Testing

B.8.1 General

(1) The department will conduct verification testing to validate the quality of the product and independent assurance testing to evaluate the sampling and testing. The department will provide the contractor with a listing of names and telephone numbers of all QV and IA personnel for the project, and provide test results to the contractor within 2 business days after the department obtains the sample.

B.8.2 Verification Testing

B.8.2.1 General

(1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.

(2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:

1. One non-random test on the first day of placement.
2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.

(3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting; except, for 3-inch aggregates, the department will collect samples from the stockpile at load-out. The department will split each sample, test half for QV, and retain half.

(4) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.

(5) The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to the specification, the department will take no further action. If QV test results are nonconforming, add the QV to the QC test results as if it were an additional QC test.

B.8.3 Independent Assurance

(1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform an IA review according to the department's independent assurance program. That review may include one or more of the following:

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

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

B.9 Dispute Resolution

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

(2) Production test results, and results from other process control testing, may be considered when resolving a dispute.

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

C (Vacant)

D (Vacant)

E Payment

(1) Costs for all sampling, testing, and documentation required under this special provision are incidental to this work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the non-performance of QMP administrative item.

(2) For material represented by a running average exceeding a control limit, the department will reduce pay by 10 percent of the contract price for the affected Base Aggregate bid items listed in subsection A. The department will administer pay reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.

301-010 (20100709)

25. Adjusting Manhole Covers.

This work shall be according to the pertinent provisions of standard spec 611, as shown on the plans, and as hereinafter provided.

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.

611-005 (20030820)

26. Cover Plates Temporary, Item 611.8120.S.

A Description

This special provision describes furnishing, installing and removing a steel plate 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, acceptably completed in place, as units.

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.
611-006 (20030820)

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

A Description
This special provision describes furnishing and placing polystyrene insulation board as shown on the plans and as hereinafter provided.

B Materials
Provide polystyrene insulation board that conforms to the requirements for Extruded Insulation Board, AASHTO Designation M230, except as hereinafter revised.

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 furnishing all excavation; and for furnishing and placing the insulation board.
612-005 (20030820)

28. Fence Safety, Item 616.0700.S.

A Description
This special provision describes furnishing and installing a plastic fence at locations shown on the plans and as hereinafter provided.

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
Service Temperature:	-60° F to 200° (ASTM D648)
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.

616-030 (20070510)

29. Landscape Planting Surveillance and Care Cycles.

If the care specialist fails to perform any of the required care cycles as specified in standard spec 632.3.19.1, the department will assess daily damages in the amount of $200.00 to cover the cost of performing the work with other forces. The department will assess these damages for each day the requirements of the care cycle remain incomplete, except when the engineer extends the required time period.

632-005 (20070510)

30. Traffic Signals, General.

Perform all traffic signal work in accordance to the plans and execute as specified in the standard specifications, standard specs 651 through 670, and these special provisions.

Work items shall be considered incidental to construction if not specifically listed on the unit price schedule, including, but not limited to removal of existing conduit and pull boxes that are not being salvaged or reused.

Traffic signal wire and street lighting wire shall not be placed in the same conduit, except for streetlights with power supplied by the traffic signal cabinet as indicated on the plans. Additionally, conduit or wire from the signal and streetlight systems shall not intersect in the same pull box. The two systems shall be completely separate.

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

Note that failure to comply with the standards and specifications may result in the cost of the corrections to be made at the contractor's expense.

31. General Requirement for Electrical.

The approved products list is located at:
http://www.dot.wisconsin.gov/business/engrserv/approvedprod.htm

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

A Description

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

B Materials

Use Conduit Rigid Nonmetallic Schedule 40 (Size) or Conduit Loop Detector, as indicated in the plans and paid for under other items in this contract. Furnish backfill material, topsoil, fertilizer, seed, and mulch conforming to the requirements of pertinent provisions of the standard specifications.

C Construction

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

D Measurement

The department will measure Install Conduit Into Existing Item 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 NUMBER	DESCRIPTION	UNIT
652.0700.S	Install Conduit Into Existing Item	Each

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.

33. Pedestrian Push Button.

Replace standard spec 658.2.5 with the following:

Furnish freeze-proof ADA compliant pedestrian push buttons made by an approved manufacturer. Band a standard R10-3e series sign direction above each push button. Include a directional arrow or arrows on the sign as appropriate for each location

34. 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 along Main Street inside the project limits.

This Crack and Damage Survey shall consist of two parts. The first part, performed prior to construction activities, shall include a visual inspection, photographs, 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, photographs, and written report describing any change in the building's condition.

B (Vacant)

C Construction
Prior to any construction activities, thoroughly inspect the building structures for existing defects, including interior and exterior walls. Submit a written report of the inspector's name, date of inspection, descriptions and locations of defects, and photographs. The intent of the written report and photographs is to procure a record of the general physical condition of the building's interior and exterior walls and foundation. The report shall be typed on bond paper and be in text form.

The photographs shall be taken by a professional photographer capable of producing sharp, grain free, high-contrast colored pictures with good shadow details. The photographs shall be 3½ inch by 5 inch color prints, glossy, and mounted in protective storage pages with clear slip-in pockets and clear background. Each sheet shall hold four prints. The back of each photograph shall contain the following information:

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

Prior to the start of any construction activities pertinent to this survey, submit a copy of the written report and photographs to the engineer.

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

In lieu of photographs, a professional videographer may be hired to use a video camera capable of producing a video with the clarity required to perform this work.

D Measurement
The department will measure Crack and Damage Survey as single complete unit of work.

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

ITEM NUMBER	DESCRIPTION	UNIT
999.1500.S	Crack and Damage Survey	LS

Payment is full compensation for providing the before and after written reports, and for photographs or video.
999-010 (20130615)

35. Granular Backfill Special, Item SPV.0035.01.

A (Vacant)

B Materials
These materials shall be a uniformly graded granular material conforming to Section 4.6.1 of the city specifications. All excavated material (including existing crushed asphalt) meeting specifications may be used as bedding, cover, or backfill. If the excavated material, which will vary by site location, does not meet the above requirement as determined by the engineer, the material shall be removed from the site and new materials supplied. Material will be deducted for bedding and cover material for typical trench width and pipe cover requirements.

C Construction
Trench backfill above the bedding and cover shall be placed in 2-foot lifts and mechanically compacted to 95% Modified Proctor Density in all areas beneath asphalt or concrete surfaces and 80% Modified Proctor Density in non-paved areas.

D Measurement
The department will measure Granular Backfill Special shall be per cubic yard for the volume of material delivered and placed to the work areas. The city will perform all measurement work. Measurement will be based upon load tickets provided to the engineer. Tickets based on cubic yards will be reduced 10% for the loss after in-place compaction. Tickets based on weight will be converted to cubic yards using an agreed upon density between the contractor and engineer, but not less than 3,300 lb./C.Y.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.01	Granular Backfill Special	CY

Payment is full compensation for supplying the material with delivery to the site; disposal of unsuitable material from the trench; and miscellaneous work to complete this item, and incidentals necessary to complete the contract work, and for which a separate bid item is not provided.

36. Excavation Below Subgrade (EBS), Item SPV.0035.02.

A Description
This special provision describes all work required to remove trench (bottom) material determined, by the engineer, as unsuitable for new water main installation

B Materials
Material to be used to replace unsuitable sub-grade shall be 1-1/2" stone as specified in Section 8.43.7 of the city specifications.

C Construction
If material below the pipe invert is unstable, as determined by the engineer, the contractor shall be required to excavate the unsuitable material (EBS) to a depth acceptable to the engineer. Place specified stone to replace the excavated material. Properly dispose of the unsuitable material.

D Measurement
The department will measure Excavation Below Subgrade (EBS), in place, per cubic yard for trench Excavation Below Sub-grade (EBS) as determined in this section, acceptably completed. The city will perform all measurement work.

The measurement will be calculated on an area with depth (d) from a point 4 inches below pipe grade to bottom of excavation and a maximum width of the pipe O.D., plus 24 inches at the trench bottom and the pipe O.D., plus 24 inches plus 3xd at a point 4 inches below pipe 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.0035.02	Excavation Below Subgrade (EBS)	CY

Payment is full compensation for furnishing all work in excavating and disposal of unsuitable material, and furnishing, placing, and compacting stone fill.

37. Planting Soil Mix, Item SPV.0035.03.

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 for raised planters and at grade tree openings shall consist of a mix of two parts of well-pulverized topsoil, as recommended by soil test compliance including mechanical properties and pH range, and one part coarse sand, and all amendments recommended by the Soil Test Laboratory and as specified herein. At grade tree openings shall have 24" of planting soil mix. Raised planters shall have 36" of planting soil mix. Planting soil mix for all trees over 1" in caliber planted into raised planters or at grade tree openings shall include a "root" growth/acclimator, application rate, per manufacturer. Provide fertilizer at levels for trees, shrubs and perennial plants as recommended by soil analysis.

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". 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 in units per cubic yard, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.03	Planting Soil Mix	CY

Payment is full compensation for furnishing and placing all materials, including excavation of but not limited to existing planter material, disposal, hauling, placing, edging, and grading.

38. Temporary Crosswalk Access, Item SPV.0045.01.

A Description

Maintain accessible crosswalks crossing the construction zone on existing pavement, new pavement, or temporary surface material. Provide an accessible crosswalk at the locations shown in the plans.

B Materials

Furnish a hard temporary surface material consisting of asphaltic surface temporary in accordance to standard spec 465.2, any grade of concrete in accordance to standard spec 602.2, skid resistant steel plating, or alternative material as approved by the engineer. Gravel or base course material is not acceptable.

Furnish 4-inch diameter polyvinyl chloride drainage pipe conforming to AASHTO M 278.

Furnish a protective layer for use in protecting the existing curb and gutter and existing pavement from asphaltic surface temporary in order to allow easy removal of asphaltic surface. Obtain approval from the engineer for the protective layer material.

Furnish safety fence in accordance to the Fence Safety article in these special provisions.

C Construction

C.1 Crosswalk

Install, maintain, move, and remove temporary surface material at Temporary Crosswalk Access locations as shown on the plans and as directed by the engineer. Level and compact the surface prior to placing temporary surface material. The temporary crosswalk shall have a minimum clear width of 4 feet; be located outside the immediate work area, as approved by the engineer; and meet the requirements of the current Americans with Disabilities Act Accessibility Guidelines (ADAAG). Install safety fence along both sides of the temporary crosswalk when the temporary crosswalk crosses the work zone. Safety fence is not required for temporary crosswalks across side streets when the crosswalk access is outside the work zone. Provide a gap in the safety fence as necessary to provide access for construction vehicles across the temporary crosswalk. The maximum width of the gap shall be 18 feet. Reconstruct Temporary Crosswalk Access when disturbed by construction operations or utility trenches.

C.2 Temporary Curb Ramp

Place 4-inch PVC drainage pipe in the flow line of the curb and gutter to maintain storm water drainage.

Place a protective layer between the existing curb and gutter or existing pavement and the asphaltic surface or concrete for temporary curb ramp.

For the portion of the temporary curb ramp in the terrace area, form the foundation by excavating at least 3 inches. Tamp or compact the foundation to ensure stability.

Place asphaltic surface temporary in accordance to standard spec 465.3.1 or place concrete in accordance to standard spec 602.3.2.3, and as shown in the plan.

Maintain temporary curb ramps until permanent curb ramps and crosswalks are in place and open to pedestrian traffic as directed by the engineer. Remove temporary curb ramps once permanent curb ramps and crosswalks are open and restore the site.

D Measurement

The department will measure Temporary Crosswalk Access by the day, acceptably completed. The measured quantity will equal the number of calendar days a crosswalk through or around the work area is open to pedestrian traffic. A crosswalk is defined as an accessible crossing of a single leg of an intersection with existing, temporary, or finished curb ramps meeting ADA requirements. A crossing of a street with an island within the route will be considered a single crosswalk. Each day that the crosswalk is out of service for more than 2 hours will result in one day being deducted from the quantity measured for payment.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0045.01	Temporary Crosswalk Access	Day

Payment is full compensation for furnishing, loading, and hauling materials; for preparing the foundation; for furnishing, placing, maintaining, and removing temporary surface material; and for reconstructing or relaying the temporary surface material.

39. Unknown Service Investigation, Item SPV.0060.01.

A Description

This special provision describes all work required to investigate existing water services of unknown pipe material at locations indicated on plans.

B (Vacant)

C Construction

The Contactor should note that several existing active services on the plans have unknown material and/or size and will be responsible to determine this information by field exploration prior to replacement/reconnection work. Excavate a minimal area (approved by the engineer) at each location in the terrace behind the curb. If service material is found to be lead/iron material, proceed with replacement work according to this section. If material is found to be copper, proceed with connecting service to new main and compacted backfilling and terrace restoration as specified.

D Measurement

The department will measure Unknown Service Investigation as each individual unit, acceptably completed. The city will perform all measurement work.

Measurement to investigate laterals of unknown material and/or size shall be per each, and shall include investigation, and abandonment work, of services proposed for abandonment. Measurement will only be made if these services are not replaced or reconnected, as the cost of that work shall be per respective work 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.0060.01	Unknown Service Investigation	Each

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work, and for which a separate bid item is not provided.

40. Manhole Cover Type Special Logo, Item SPV.0060.02.

A Description

This special provision describes furnishing and installing logo manhole covers.

B Materials

Furnish manhole covers in accordance to the pertinent requirements of standard spec 611.2 and the plan details. Furnish Neenah Foundry R-1710-NR frames with N1090-1093 covers.

C Construction

Install manhole covers in accordance to standard spec 611.3.

D Measurement

The department will measure Manhole Cover Type Special Logo by each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Manhole Cover Type Special Logo	Each

Payment is full compensation for furnishing new covers, including frames, grates, curb plates and all other required materials; and for installing and adjusting each cover.

41. Inlet Cover Type H Special Logo, Item SPV.0060.03.

A Description

This special provision describes furnishing and installing logo inlet covers.

B Materials
Furnish inlet covers in accordance to the pertinent requirements of standard spec 611 and the plan details. Furnish Neenah Foundry R-3246 inlet castings with Type V grate.

C Construction
Install inlet covers in accordance to standard spec 611.3.

D Measurement
The department will measure Inlet Cover Type H Special Logo by each individual unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Inlet Cover Type H Special Logo	Each

Payment is full compensation for furnishing new covers, including frames, grates, curb plates and all other required materials; and for installing and adjusting each cover.

42. Utility Line Opening (ULO), Item SPV.0060.04.

A Description
This special provision describes performing the necessary excavation to uncover utilities for the purpose of determining elevation and potential conflicts with proposed storm sewer or other work, as shown on the plans or as directed by the engineer.

B (Vacant)

C Construction
Perform the excavation in such a manner that the utility in question is not damaged and the safety of the workers or area is not compromised.

Perform the utility line openings 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. Prior to ordering structures, perform ULO's. Where utilities are within 6 feet of each other at a potential conflict location, only one utility line opening is called for. In these cases, a single utility line opening will be considered full payment to locate multiple utilities. Utility line openings include a trench up to 10 feet long as measured at the trench bottom, and of any depth required to locate the intended utility.

Obtain prior approval for all utility line openings from the engineer and coordinate all ULOs with the engineer. Notify the utility engineers on their agents of this work a minimum of three days prior to the work so they may be present when the work is completed. Verify the need for performing ULO's as shown on the plans, since some of the utilities may have been or will be relocated prior to the start of construction.

D Measurement
The department will measure Utility Line Opening (ULO) 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.0060.04	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; and for cleanup.

Existing pavement, concrete curb, gutter, and sidewalk removals necessary to facilitate utility line openings shall not be considered part of or paid for under Utility Line Openings, but are considered separate and measured and paid for separately as removal items. Replacement pavement, concrete curb, gutter, and sidewalk items shall also be considered separate from Utility Line Openings and will be measured and paid for separately.

43. Concrete Base Type 3 Special, Item SPV.0060.05.

A Description
This special provision describes constructing concrete foundations, including necessary hardware, as shown on the plans, in accordance 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 501.2 as modified in standard spec 716. Provide QMP for class III ancillary concrete as specified in standard spec 716.

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 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 1-inch by 40-inch bolts, including a 4 inch L-bend at the bottom.

Furnish bar steel reinforcement conforming to the requirements of standard spec 505.

C Construction
Construct the bases with the anchor bolts 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.

Install non-shrink grout between pole and concrete base to properly seal.

Do not erect poles on the concrete bases until the bases have cured for at least seven days.

All concrete bases require a rubbed finish down to finished grade.

D Measurement
The department will measure Concrete Base Type 3 Special by each individual unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Concrete Base Type 3 Special	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; furnishing and installing 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.

44. Roadway Light Pole, Item SPV.0060.06.

A Description
This special provision describes furnishing and installing a roadway light pole and outdoor surface mounted outlet in accordance to standard specs 651 through 660, as shown on the plans, and as approved by the engineer.

B Materials
Furnish the following pole: Ameron #6B1-29 with overall length of 29 feet 1 inch. Finish shall be Ameron standard color #37, Uncoated Black and White.

Furnish the following outdoor surface mounted outlet:

Tamper-Resistant and Weather-Resistant In-use GFI Convenience Receptacles: Square face, 125V, 20A; comply with NEMA WD 1, NEMA WD 6 Configuration 5-15R, and UL 498. The outlet cover and box shall be stainless steel metal and powder coated gray.

The outlet shall comply with NFPA 70, "Receptacles, Cord Connectors, and Attachment Plugs (Caps)" Article, "Tramper-Resistant Receptacles in Dwelling Units" Section, when installed in wet and damp locations.

Outlet shall be manufactured by Cooper TWRBR15, Hubbell DR15TR, Leviton TRW15, or Pass & Seymour TRW26252, or Approved Equal.

C Construction
Install in accordance to standard specs 651 through 660 and the manufacturer's recommendations. Manufacturer to supply standard anchor bolts for installation in base.

The outdoor surface mounted outlet shall be mounted to the outside of the concrete pole. The outlets shall be mounted at approximately the same height as the pedestrian light poles. The final outlet location will need to be adjusted for those that have signal equipment mounted to them. Prior to installation of the outlet, contact Dave Lou, City of Janesville, at (608) 373-3407 to confirm the final outlet location. Provide a one week notice prior to installing the outlets.

The outlets shall be on a separate circuit than street lights and/or traffic signal equipment.

D Measurement
The department will measure Roadway Light Pole by each individual unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.06	Roadway Light Pole	Each

Payment is full compensation for furnishing and installing a light pole; and for furnishing and install outdoor surface mounted outlet.

45. Decorative Luminaire, Item SPV.0060.07.

A Description
This special provision describes furnishing and installing a mast arm in accordance to standard specs 651 through 660, as shown on the plans, and as approved by the engineer.

B Materials
Furnish the following luminaire: Sternberg Libertyville #1914LED/A/RLM 43 with multi-tap ballast, borosilicate glass, and photocell. Finish shall be Black.

C Construction
Install in accordance to standard specs 651 through 660 and the manufacturer's recommendations.

D Measurement
The department will measure Decorative Luminaire by the 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.0060.07	Decorative Luminaire	Each

Payment is full compensation for furnishing and installing the luminaire.

46. Decorative Mast Arm, Item SPV.0060.08.

A Description
This special provision describes furnishing and installing a mast arm in accordance to standard specs 651 through 660, as shown on the plans, and as approved by the engineer.

B Materials
Furnish the following mast arm: Ameron #CZ-6' with Ameron Oct Cap w/ Finial top mount cap. Finish shall be Black Powder Coat.

C Construction
Install in accordance to standard specs 651 through 660 and the manufacturer's recommendations. Manufacturer to supply standard anchor bolts for installation in base.

D Measurement
The department will measure Decorative Mast Arm by each individual unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.08	Decorative Mast Arm	Each

Payment is full compensation for furnishing and installing a mast arm.

47. Existing Pedestrian Light Modifications, Item SPV.0060.09.

A Description

This special provision describes furnishing and installing an outdoor surface mounted outlet and connecting new wiring to existing fixtures at the location shown in the plans.

B Materials

Furnish the following outdoor surface mounted outlet:

Tamper-Resistant and Weather-Resistant In-use GFI Convenience Receptacles: Square face, 125V, 20A; comply with NEMA WD 1, NEMA WD 6 Configuration 5-15R, and UL 498. The outlet cover and box shall be stainless steel metal and powder coated gray.

The outlet shall comply with NFPA 70, "Receptacles, Cord Connectors, and Attachment Plugs (Caps)" Article, "Tramper-Resistant Receptacles in Dwelling Units" Section, when installed in wet and damp locations.

Outlet shall be manufactured by Cooper TWRBR15, Hubbell DR15TR, Leviton TRW15, or Pass & Seymour TRW26252, or Approved Equal.

C Construction

The existing pedestrian pole shall remain in place. The outdoor surface mounted outlet shall be mounted to the outside of the concrete pedestrian pole to within 12 inches of the pedestrian light fixture. Prior to installation of the outlet, contact Dave Lou, City of Janesville, at (608) 373-3407 to confirm the final outlet location. Provide a one week notice prior to installing the outlets.

Existing high-pressure sodium fixtures are being replaced with LED fixtures by the city prior to construction. The contractor shall connect new wire to supply power to all light fixtures.

The pedestrian light pole at Station 100+71, 19' LT has a second fixture which is used to illuminate the American Flag located behind the sidewalk. The contactor shall reconnect new wiring to supply power to this light fixture.

Excavate to lower handhole to install conduit and wiring. Conduit shall be extend to the above grade handhole as shown on the plans.

The electrical outlets shall be on separate circuits than the fixtures.

D Measurement
The department will measure Existing Pedestrian Light Modifications 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.0060.09	Existing Pedestrian Light Modifications	Each

Payment is full compensation for furnishing and installing the outlet; for furnishing and installing electrical wire; for connecting new wire to the light fixtures; and for excavation and backfill.

48. Reconnect Existing Service, Item SPV.0060.10.

A Description
This special provision describes all work required for connecting existing water services to the new water main at locations indicated on plans.

B Materials
The contractor shall supply all water service pipe for connecting existing copper services of less than 1" with ¾" diameter, Type "K" seamless copper tubing, and supply all service corporations, in accordance to Section 6.6.1 of the city specifications. Existing 1" – 2" replacement services shall be replaced with same size specified copper tubing.

All connections between new and existing service lines, 2" or less, shall be made using a compression-type fitting (Ford Pack Joint Coupling or approved equal) to be supplied by the contractor.

C Construction
Comply with applicable parts of Section 8(C) for connecting existing copper services to new water main.

D Measurement
The department will measure Reconnecting Existing Service, on new main replacement, will be measured per each for service reconnected, acceptably completed. The city will perform all measurement work.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.10	Reconnect Existing Service	Each

Payment is full compensation for furnishing all investigative work (including excavation) to confirm size/material of indicated services, supplying/installing new corporation stop, curb stop, box and cover; performing the tap; supplying/installing necessary copper pipe and fittings to connect to and/or extend from the new main to existing service pipe, with proper cover over the pipe; and miscellaneous items necessary for a complete installation for which a separate bid item is not provided.

49. Pedestrian Pole Bracket Arm, Item SPV.0060.11.

A Description

This section describes furnishing and installing custom manufactured Pedestrian Pole Bracket Arms as shown on the plans.

B Materials

Products

Furnish custom Pedestrian Pole Bracket Arm to match existing hangers. Contractor shall remove a hanger from the existing light post at Station 102+16.86, 25.79' RT to use as a template. Contractor shall verify all dimensions.

Post shall be fabricated to attach to the existing pedestrian light poles by Traditional Concrete, Inc., Skyliner IV 400 Series Pole, D410-CB-PW-3T.

Hangers shall be designed to withstand wind loads of a banner and the weight of hanging basket. Construction shall be from solid steel. Hangers shall be fully welded and ground smooth without.

Finish

Pedestrian Pole Bracket Arm shall be painted steel; Color: Black.

Submittal

Contractor shall submit shops drawings, structural calculations and one complete sample unit for approval prior to production of units. Approved sample shall be used as a part of the project.

C Construction

Installation

Install Pedestrian Pole Bracket Arm in locations shown on the plan. Banner arm side shall be installed to face road. Hangers shall be attached via clamp and bolts.

Delivery

Deliver products to site in manufacturer's original, unopened containers and packaging. Upon delivery, examine packages immediately to ensure all products are complete and undamaged.

Storage
Store products in a protected, dry area in manufacturer's unopened containers and packaging.

Handling
Protect product's finish from damage during handling and installation.

D Measurement
The department will measure Pedestrian Pole Bracket Arms as a unit (one banner arm and one planter hook per 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.0060.11	Pedestrian Pole Bracket Arm	Each

Payment is full compensation for providing and installing all materials necessary to completely install each Pedestrian Pole Bracket Arm assembly; and for installation of all items incidental to the successful installation of each plant hanger.

50. Perennials (Species, Root, Size), Aster, Purple Dome, CG, #1, Item SPV.0060.12; Chive, Summer Beauty, CG, #1, Item SPV. 0060.13; Coneflower, Little Giant, CG, #1, Item SPV. 0060.14; Daylilly, Happy Returns, CG, #1, Item SPV. 0060.15; Dropseed, Prairie, CG, #1, Item SPV. 0060.16; Feather Reed Grass, Karl Foerster, CG, #1, Item SPV. 0060.17; Lilyturf, CG, #SP04, Item SPV. 0060.18; Milkweed, Butterfly, CG, #1, Item SPV. 0060.19; Tufted Hairgrass, Gold Dew, CG, #1, Item SPV. 0060.20; Switchgrass, Shenandoah, CG, #1, Item SPV. 0060.21.

A Description
This section describes furnishing and planting perennials and ornamental grasses in planting beds as shown on the plans. This includes furnishing all necessary materials, excavating plant holes, backfilling, watering and disposing of waste materials and shall follow the requirements of Section 632 of the Standard Specifications – Plant Materials.

References
- American National Standards Institute (ANSI)
  - ANSI Z60.1 – American Standards for Nursery Stock
  - ANSI A300 – American National Standard for Tree Care Operations - Tree, Shrub and Other Woody Plant Maintenance-Standard Practices

- Wisconsin Department of Transportation (WisDOT)
    - WisDOT Standard Specifications for Highway and Structure Construction

- Standardized Plant Names, Second Edition (1942). American Joint Committee on Horticulture Nomenclature, Horace McFarland Company, Harrisburg, PA.

B Materials

Products

Furnish plantings in the variety and size noted on the planting schedule; as well as topsoil, mulch, fertilizer and water as required to construct the planting bed.

C Construction

Installation

Install the perennials and construct the planting bed as defined in standard spec 632 – Plant Materials and the planting details.

Delivery, Storage and Handling

Arrange for the acceptance and unloading of plants at the project site.

All plants are to be labeled by plant name and size. Labels shall be attached securely to all plants, bundles, and containers of plant materials when delivered. Labels shall be durable and legible, with information given in weather-resistant ink or embossed process lettering.

All plant materials, shipments and deliveries shall comply with current state and federal laws and regulations governing the inspection, shipping, selling and handling of plant stock. If required by law or regulation, a certificate of inspection, or a copy thereof, for injurious insects, plant diseases, and other plant pests shall accompany each shipment or delivery of plant material. The certificate shall bear the name(s) and address(es) of the source of the plant stock.

During transport, no plant shall be bound with rope or wire in a manner that damages trunks or breaks branches. Plants shall also not be dragged, lifted or pulled by the trunk, branches or foliage in a damaging way. No plant shall be thrown off of a truck or loader to the ground.

Prior to installation, all plants must be protected from sun and drying winds.

Containerized or balled and burlapped plants not being installed immediately must be kept in a shaded area, well-covered with wood chips, soil, or other approved material, and kept well-watered. Install all plants within three days of delivery.

Cover roots of bare root plants with a moist tarp, burlap, sphagnum moss, or mulch while being transported to, or while being held at the project site. Soak the bare roots overnight in water before planting. Just before planting, extend the roots carefully into a natural position, free of bunching, kinking or circling. Cut back all broken or damaged roots to a

point clean and free of rot. No additional root pruning is allowed. Carefully work backfill mix among the roots while simultaneously watering.

Fertilizer shall be delivered to the site in original, sealed containers, and stored in a waterproof space. Containers shall bear the manufacturer's name, analysis, trademark and guarantee as per standards of the Wisconsin Department of Agriculture.

D Measurement

The department will measure Perennials (Species, Root, Size) as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION (Species, Root, Size)	UNIT
SPV.0060.12	Aster, Purple Dome, CG, #1 *(Symphyotrichum novae-angliae 'Purple Dome')*	Each
SPV.0060.13	Chive, Summer Beauty, CG, #1 *(Allium tanguticum 'Summer Beauty')*	Each
SPV.0060.14	Coneflower, Little Giant, CG, #1 *(Echinacea purpurea 'Little Giant')*	Each
SPV.0060.15	Daylilly, Happy Returns, CG, #1 (*Hemerocallis 'Happy Returns')*	Each
SPV.0060.16	Dropseed, Prairie, CG, #1 (*Sporobolus heterolepis)*	Each
SPV.0060.17	Feather Reed Grass, Karl Foerster, CG, #1 (*Calamagrostis x acutiflora 'Karl Foerster')*	Each
SPV.0060.18	Lilyturf, CG, #SP04 (*Liriope spicata)*	Each
SPV.0060.19	Milkweed, Butterfly, CG, #1 (*Asclepia tuberose)*	Each
SPV.0060.20	Tufted Hairgrass, Gold Dew, CG, #1 *(Deschanosia cespitosa 'Gold Tau')*	Each
SPV.0060.21	Switchgrass, Shenandoah, CG, #1 *(Panicum virgatum 'Shenandoah')*	Each

Payment is full compensation for providing and installing all materials necessary to completely install each perennial; constructing the planting beds, furnishing and installing planting, topsoil, 3" of mulch, fertilizer, watering; creating proper soils for the planting bed; for performing all grading, excavating, backfilling, and for proper disposing of surplus material and restoration.

51. Install City Supplied Street Name Sign, Item SPV.0060.22.

A Description
This special provision describes furnishing mounting hardware and installing hardware and street name sign in accordance to standard specs 637 and 641, as shown on the plans, and as approved by the engineer.

B Materials
Furnish mounting hardware in accordance to standard specs 637 and 641, as shown on the plans, and as approved by the engineer.

C Construction
The City will supply and deliver street name sign plates. The City contact is Dennis Ryan at (608) 755-3171. Provide a minimum 30 day notice to the City prior to installation. Install in accordance in accordance to standard specs 637 and 641, as shown on the plans, and as approved by the engineer.

D Measurement
The department will measure Install City Supplied Street Name Sign by each individual unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.22	Install City Supplied Street Name Sign	Each

Payment is full compensation for furnishing mounting hardware and installing mounting hardware and street name sign.

52. Bulbs (Species), Daffodil, Mixed, Item SPV.0060.23.

A Description
This section describes furnishing and planting of naturalizing daffodil bulbs in planting beds as shown on the plans. This includes furnishing all necessary materials, excavating bulb holes, backfilling, watering and disposing of waste materials and shall follow the requirements of standard spec 632 – Plant Materials, and as follows:

References

- American National Standards Institute (ANSI)
  - ANSI Z60.1 – American Standards for Nursery Stock
  - ANSI A300 – American National Standard for Tree Care Operations - Tree, Shrub and Other Woody Plant Maintenance-Standard Practices

- Wisconsin Department of Transportation (WisDOT)
    - WisDOT Standard Specifications for Highway and Structure Construction

- Standardized Plant Names, Second Edition (1942). American Joint Committee on Horticulture Nomenclature, Horace McFarland Company, Harrisburg, PA.

B Materials

Products

Furnish 'Spring Loaded' Daffodil Naturalizing Mix by Colorblends, 'Narcissus Grand Mixture' Naturalizing Daffodil Mixture by Van Engelen, Inc, 'Scheepers Gold medal Narcissus Mixture by John Sheepers, Inc., or equal. Bulb naturalizing mix shall include a variety of at least 12 different naturalizing daffodils that provide a succession of blooming time from early to late spring, lasting 5-6 weeks. Bulb sizes shall be a minimum of 16-cm and shall conform to the current edition of the American Standards for Nursery Stock.

Bulbs shall be insect and disease free and originate from a nursery specializing in bulb production. Bulbs shall be firm, heavy and free of deep blemishes, cuts, soft spots and have firm, solid basil plates.

C Construction

Installation

Install bulbs as shown on the plans and details. Bulbs shall be planted in naturalized patterns amongst perennial plantings, no closer than 6" to the center of perennials. Bulbs shall be planted to depth of 2-3 times the diameter of the bulb, or as specified by the grower. Planting shall occur between the dates of October 1 through November 1. Plant bulbs such that their basal plates face downward, then cover with excavated soil. Plant bulbs with minimal disturbance to surrounding plant material.

Bulb plantings shall not receive any fertilizers.

D Measurement

The department will measure Bulbs 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.0060.23	Daffodil, Mixed, Bulb *(Narcissus sp.)*	Each

Payment is full compensation for providing and installing all materials necessary to completely install each bulb; excavating bulb holes, backfilling, watering and proper disposing of surplus material and restoration, 3" of mulch; and for furnishing all labor, tools, equipment, materials and incidentals necessary to complete the contract work.

53. Bicycle Rack, Item SPV.0060.24.

A Description

This special provision describes furnishing and installing custom manufactured Bicycle Racks as shown on the plans and details.

B Materials

Products

Bicycle Racks shall conform to style and material shown in the plan detail. Provide Madrax (Waunakee, WI, (800) 448-7931) 'U' Bicycle Rack with Custom Janesville Lean Bar.

Finish

Bicycle Racks shall be finished with a 'Mad Shield' Finish, a two-part finish including galvanizing then powder coating with a triglycidyl isocyanurate (TGIC) polyester powder coat; Color: Black; Attachment: Surface mounted.

C Construction

Installation

Install Bicycle Racks in the locations shown on the plan per manufacturer's recommendation for surface mounting. Bicycle Racks shall be anchored onto concrete sidewalk per manufacturer's recommendations. Bicycle Racks shall be shimmed to maintain level. Shims shall be powder coated steel, black in color.

Mounting

It is not recommended to locate anchor bolts until bench is in place.

Delivery

Deliver products to site in manufacturer's original, unopened containers and packaging. Upon delivery, examine packages immediately to ensure all products are complete and undamaged.

Storage

Store products in a protected, dry area in manufacturer's unopened containers and packaging.

Handling

Protect product's finish from damage during handling and installation.

D Measurement

The department will measure Bicycle Racks as each individual unit, acceptably delivered and installed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.24	Bicycle Rack	Each

Payment is full compensation for providing and installing all materials necessary to completely install the Bicycle Rack; furnishing and installing hardware, and connectors; and for performing all mounting, leveling, proper disposing of surplus material and restoration.

54. Trash Receptacle, Item SPV.0060.25; Trash Receptacle (Salvage/Reinstall), Item SPV.0060.26.

A Description

This special provision describes furnishing and installing new and salvaged manufactured Trash Receptacles as shown on the plans and details.

B Materials

Products

New Trash Receptacle shall conform to style and material shown in the plan detail. Provide Victor Stanley (Dunkirk, MD 1-800-368-2573) Ironsites Series, Model S-42; 36 gallon; S-2 formed dome lid.

Finish

New Trash Receptacles shall be finished with a triglycidyl isocyanurate (TGIC) polyester powder coat; Color: VS Black; Attachment: Surface mounted.

C Construction

Installation

Install new and salvaged Trash Receptacles in the locations shown on the plan per manufacturer's recommendation for surface mounting. Trash Receptacles shall be anchored onto concrete sidewalk per manufacturer's recommendations. Trash Receptacles shall be shimmed to maintain level. Shims shall be powder coated steel, black in color.

Mounting

It is not recommended to locate anchor bolts until bench is in place.

Delivery

Deliver products to site in manufacturer's original, unopened containers and packaging. Upon delivery, examine packages immediately to ensure all products are complete and undamaged.

Storage

Store products in a protected, dry area in manufacturer's unopened containers and packaging.

Handling

Protect product's finish from damage during handling and installation.

D Measurement
The department will measure Trash Receptacle 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.0060.25	Trash Receptacle	Each
SPV.0060.26	Trash Receptacle (Salvage/Reinstall)	Each

Payment is full compensation for providing and installing all materials necessary to completely install the Trash Receptacle; furnishing and installing hardware, and connectors; for performing all mounting, leveling, proper disposing of surplus material and restoration.

55. Bench, 6-foot, Backed, Item SPV.0060.27; Bench, 6-foot, Backless, Item SPV.0060.28; Bench, 6-foot, Backed (Salvage/Reinstall), Item SPV.0060.29.

A Description
This special provision describes furnishing and installing new and salvaged Benches and appurtenances.

B Materials
Products
New Benches shall conform to style and material shown in the plan detail. Provide Victor Stanley (Dunkirk, MD, (800) 368-2573) Classic Series Bench, Model CR-96, 6-foot and Model CR-296, 6-foot.

Finish
New Benches shall be finished with a triglycidyl isocyanurate (TGIC) polyester powder coat; Color: VS Black; Attachment: Surface mounted. 6-foot length benches shall be backed with end arms. 6-foot length benches shall be backless and without end arms.

C Construction
Installation
Install new and salvaged Benches per manufacturer's recommendations. Bench's rear and front legs shall be anchored into concrete base pad per manufacturer's recommendation and as detailed. Bench shall be shimmed to maintain level. Shims shall be powder coated steel, black in color.

Mounting
It is not recommended to locate anchor bolts until bench is in place.

Delivery
Deliver products to site in manufacturer's original, unopened containers and packaging. Upon delivery, examine packages immediately to ensure all products are complete and undamaged.

Storage
Store products in a protected, dry area in manufacturer's unopened containers and packaging.

Handling
Protect product's finish from damage during handling and installation.

D Measurement
The department will measure Bench 6-foot (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.0060.27	Bench, 6-foot, Backed	Each
SPV.0060.28	Bench, 6-foot, Backless	Each
SPV.0060.29	Bench, 6-foot, Backed (Salvage/Reinstall)	Each

Payment is full compensation for providing and installing all materials necessary to completely install the Bench; furnishing and installing hardware, and connectors; for performing all mounting, leveling, proper disposing of surplus material and restoration.

56. Abandon Existing Water Main, Item SPV.0060.30; Water Main Offset 6-Inch, Item SPV.0060.31; Water Main Offset 12-Inch, Item SPV.0060.32.

A Description
This special provision describes all work required for the abandonment of existing 6" - 12" cast iron water main, including existing water vales and hydrants to be replaced. Work also includes required new main vertical offsets at locations where conflicts with existing utilities exist or are encountered during main installation.

B Materials
Supply Class 52 ductile pipe and fittings (including all bends, tees, sleeves, etc.), as specified in Section 6.5.1 of the city specifications.

C Construction
Water Main/Valve/Hydrant Abandonment
Abandon existing lead/iron services to 4"-10" cast iron water main and hydrant lead pipes and remove and/or replace associated valves/manholes and hydrants/valves according to

limits as noted on the plans. At locations where pipe ends are created by removing valves or the pipe is cut, the ends shall be secured with a water-tight plug bolted in place or watertight cap. The abandonment work shall include removal and disposal of unacceptable material including surface materials, supplying necessary repair materials, supplying, placing and compacting specified backfill, and surface restoration in accordance to applicable sections of these specifications. The repair areas shall be neatly saw-cut (with exceptions as noted in Section 62(C.1)) prior to hard surface material placement.

The removal of existing valves and hydrants includes cutting pipe outside valve structure or before (street-side) hydrant valve, providing and installing water-tight plugs, removing the valve or hydrant, and removing entire valve vault structure and casting and cover. Existing valve, valve structure, and hydrant materials shall remain the property of the contractor.

Connect new main to existing mains using approved fittings. Specified main testing must be completed and approved for service prior to any connections to existing mains. The contractor shall assure continuity between sleeved connections to existing/new mains (in same configuration as standard pipe joints), and the engineer must approve continuity on all sleeved connections.

Water Main Offset

Note and install any main offsets indicated on plans. These offsets shall achieve a minimum 24" vertical separation between the storm sewer and new mains and services, and also apply to connecting to existing mains at intersections. This separation applies to all storm crossings under or over new mains/services. Any offsets shall also comply with minimum vertical separation of 18" under or 6" over existing sanitary sewer. The work shall comply with section 4.10 of the city specifications. The engineer must approve materials and installation of all offsets, along with any variance from vertical separation requirements. Any offset that can be made without fittings (i.e., joint deflections) shall not be defined as an offset for payment purposes.

D Measurement

The department will measure Abandon Existing Water Main per each block location (including associated intersection abandonment work) on North and South Main Street, acceptably completed.

The department will measure Water Main Offset (Inch) by each unit, acceptably completed. Specific offsets have been defined on the plans, although additional offsets may be warranted as specifically approved by the engineer.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.30	Abandon Existing Water Main	Each
SPV.0060.31	Water Main Offset 6-Inch	Each
SPV.0060.32	Water Main Offset 12-Inch	Each

Payment is full compensation for furnishing all work described herein, and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work, and for which a separate bid item is not provided.

Payment for Abandon Existing Water Main is full compensation for all work as specified in this section, including removing, plugging and/or capping pipes, removal of valves/manholes, hydrants, and other specified items.

Payment for Water Main Offset (Inch) is full compensation for excavation, all offset materials, insulation, granular backfill, and miscellaneous items necessary for a complete offset installation. All offset work associated with connecting to existing mains at intersections, as well as shown on the plans shall be incidental to the water main replacement work.

57. New Hydrant, Item SPV.0060.33.

A Description
This special provision describes all work required for new water hydrant installation.

B Materials
Supply all hydrants and gate valve assemblies according to Section 6.7.1 of the city specifications. Provide shop drawings for all hydrant materials for approval.

C Construction
New hydrants indicated on plans shall be installed according to Section 6.7.2 and Detail No. 9 of the city specifications. Note that several hydrants will be relocated from existing locations on Main Street plan sheets. The valve box shall be set flush with the existing ground and hydrant set to proper height above finished grade. Existing hydrants/valves shall be removed as specified in Section 54(C) as part of the associated main abandonment and as directed by the engineer to maintain fire protection throughout the construction work. All new hydrants shall be operated and fully opened (flushed) prior to acceptance by the engineer.

All bedding, cover, and backfill materials shall be placed in the same manner as described for installing the water main pipe. All backfill shall be granular, unless otherwise approved by the engineer, and brought to proper sub-grade for street and terrace restoration.

D Measurement
The department will measure New Hydrant as each individual installation, acceptably completed. The city will perform all measurement work. New hydrant installation shall be measured per each for replacement work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.00603.33	New Hydrant	Each

Payment is full compensation for furnishing all work described herein, and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work, and for which a separate bid item is not provided. Work shall include excavation for hydrant; installation of contractor supplied hydrant, hydrant valve/box, and cover; placement of bedding, cover, and backfill materials with compaction; and miscellaneous items necessary for a complete installation. Payment for removal of existing hydrants shall be included in the associated main abandonment work.

58. Gate Valve with Manhole 4-Inch, Item SPV.0060.34; Gate Valve and Box 4-Inch, Item SPV.0060.35; Gate Valve with Manhole, 6-Inch Item SPV.0060.36; Gate Valve and Box 6-Inch, Item SPV.0060.37; Gate Valve with Manhole, 8-Inch Item SPV.0060.38; Gate Valve with Manhole 12-Inch, Item SPV.0060.39.

A Description

This special provision describes all work required for new water valve and manhole or box installation.

B Materials

Supply all 6”- 12” gate valves according to Section 6.4.1 of the city specifications. *No* tap valves are proposed under this contract.

Supply precast concrete manholes, according to Section 6.2.1 and Detail No. 8 of the city specifications for 6” through 12” gate valves under this contract. The manhole depth for the replacement valves will vary at valve locations near water main offsets in the contract. Confirm depths and pipe openings, in the field, of all replacement manholes prior ordering structures. The manholes shall be fabricated to allow 4” – 6” of vertical adjustment between the top of structure and the frame. The new adjusting rings and frames and cover shall conform to Section 6.2.1 of the city specifications.

Supply cast iron valve boxes and covers, according to Section 6.3.1 of the city specifications for 4” or greater water or fire service gate valves under this contract.

Provide shop drawings for all manholes and boxes. At a minimum, manhole drawings shall have diameter dimensions, corbel and invert (or depth) elevations, and the size and angle of all pipe openings. Drawings shall be submitted for approval by the engineer prior to manufacture. Engineer approval is conditional and the contractor shall be responsible for any structure/drawing errors from the plans.

C Construction

Valves, unless noted differently below, shall be installed according to Section 6.4.2 and Detail No. 8 of the city specifications. Locking gasketed joints (Field Lok 350 by US Pipe or approved equal) shall be installed on the last two pipe joints before all new valves on side street intersections to allow for specified testing prior to connecting to existing mains.
.

Valve manholes shall be installed as specified in Section 6.2.2 and shown on Detail No. 8 of the city specifications. The contractor supplies the specified casting and cover and adjusting rings to be installed per Section 6.2.2 of the city specifications. Manhole frames shall be set to existing street grades or proposed grades as directed by the engineer.

Valve boxes shall be installed as specified in Section 6.3.2 of the city specifications. New gate valves shall be installed, with valve boxes, in the terrace/sidewalk areas for existing, 4" or greater, services or fire lines where tap valves/manholes are installed on the existing mains. These tap valves/manholes shall be removed according to same procedures established for existing main line valves. As with all service disruptions, coordinate with the engineer and affected businesses with the strong emphasis on minimizing the time period of these disruptions, to include performing this work outside of normal or peak business hours.

D Measurement

The department will measure Gate Valve with Manhole (Inch) and Gate Valve and Box (Inch) as each individual unit, acceptably completed. The city will perform all measurement work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.34	Gate Valve with Manhole 4-Inch	Each
SPV.0060.35	Gate Valve and Box 4-Inch	Each
SPV.0060.36	Gate Valve with Manhole 6-Inch	Each
SPV.0060.37	Gate Vavle and Box 6-Inch	Each
SPV.0060.38	Gate Valve with Manhole 8-Inch	Each
SPV.0060.39	Gate Valve with Manhole 12-Inch	Each

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work, and for which a separate bid item is not provided.

Payment for Gate Valve with Manhole is full compensation for excavation for manhole and valve, removal of existing materials, installation of contractor supplied valve at locations shown on plans; supplying and installing valve vault; connections to existing mains; setting of contractor supplied frame/cover and adjusting rings; placement and compaction of backfill around vault; and miscellaneous items necessary for a complete installation.

Payment for Gate Valve and Box is full compensation for excavation for box and valve, removal of existing materials, installation of contractor supplied valve at locations shown on plans; supplying and installing valve box; connections to existing mains; setting of box cover at existing surface grade; placement and compaction of backfill around valve and box; and miscellaneous items necessary for a complete installation.

59. Water Service Replacement Short, Item SPV.0060.40; Water Service Replacement Long, Item SPV.0060.41.

A Description

This special provision describes all work required for new water service installation to replace existing services at locations indicated on plans.

B Materials

Supply all replacement water service pipe of less than 1" with ¾" diameter, Type "K" seamless copper tubing, and supply all service corporations, curb stop valves, and curb boxes in accordance to Section 6.6.1 of the city specifications. Existing 1" – 2" replacement services shall be replaced with same size specified copper tubing.

All connections between new and existing service lines, 2" or less, shall be made using a compression-type fitting (Ford Pack Joint Coupling or approved equal) to be supplied by the contractor.

C Construction

Comply with Section 6.6.2 of the city specifications and supplemented herein for replacing existing lead/iron services from the main to the curb box, and reconnecting new and existing copper services to the new main, as designated on plan sheets. In order to eliminate replacing existing pavement and curb and gutter, the new water service pipe shall be bored from the new main to the existing curb box for the long side service. Long side fire services (greater than 2") may be installed by excavation method from the new tee at the main to the new valve location (as approved by the engineer) in compliance with applicable parts of Section 62. If the vertical separation (invert to invert) between the new long side service crossing an existing sanitary or storm sewer is less than 2 feet, the Televise the sewer upon completion of work to validate that no damage was done by the bored service. The contractor may propose, for engineer's approval, a method of extracting or pipe bursting the existing pipe (to be replaced) while simultaneously pulling in the new pipe in the same voided alignment. The engineer may waive the televised sewer requirement if assured that the new pipe installation would not damage associated sewers. The short (water or fire) service replacement shall be completed by excavation. A minimum 5 feet of cover must be maintained over new service/fire line. The contractor may also replace the long side services (excluding fire services) by excavated method; however, all associated street restoration, including curb and gutter replacement, work shall be incidental to this method. All corp. stops (or tee fittings for fire lines) shall be installed and pressure tested with the new main. For water services of 2" or less, the supply necessary specified copper pipe to connect from new corporation to new curb stop and

adapt to existing service material (lead, iron, galvanized, or copper) to the building. For fire services greater than 2", supply necessary, same diameter, specified new ductile iron pipe. All connections between new and existing lines shall be made using the specified compression-type/pressure fitting or sleeve. The existing pipe being replaced may be removed or abandoned in place. The total pipe replacement procedure shall be such that maximum service outages shall be six hours. Coordinate scheduled water service shut-offs with the engineer and affected businesses/residences three days in advance (minimum). The shut-off periods may include hours outside of normal contract work hours of 7:00 AM – 5:00 PM in order to reasonably accommodate the needs of affected businesses.

After completion of water main and service installations at *ALL* locations, arrange to televise, with sewer televising camera, any storm or sanitary (*mains OR leads/laterals*) where invert elevations are within 2 vertical feet (over or under) of the new main over the laterals or from which a service is bored. This is to confirm that affected sewer was not damaged from the excavated main or bored service. Lateral televising must be done from the main sewer utilizing a mainline lateral camera. This inspection shall be recorded on one DVD disk (no copies are needed) with written inspection report to be submitted to the engineer at the completion of the entire project. The televised inspection shall conform to Section 5.8.3 of the city specifications.

Coordinate work with the engineer and Water Utility to abandon inactive services on the existing main on Main Street. The Water Utility shall assist in locating the associated stop boxes, and if found, the respective box/valve assembly shall be excavated and removed, and the service plugged by the contractor. No service abandonment work is required at connection with existing main. Proceed with compacted backfilling and terrace restoration as specified.

D Measurement

The department will measure Water Service Replacement (Type) on new main replacement, will be measured per each for long service (west side of street) or short service, acceptably completed. The city will perform all measurement work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.40	Water Service Replacement Short	Each
SPV.0060.41	Water Service Replacement Long	Each

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work, and for which a separate bid item is not provided.

Payment includes any investigative work (including excavation) to confirm size/material of indicated services, supplying/installing new corporation stop, curb stop, box and cover; performing the tap; supplying/installing necessary copper pipe and fittings to connect to and extend from the new main to the new curb stop; connection to the existing pipe on the

house side of the curb box; boring long service lateral, with proper cover over the pipe; and miscellaneous items necessary for a complete installation. The cost of placing insulation as indicated on plans, or directed by the engineer, shall be incidental to pipe unit price.

60. Planter Curb Special, Item SPV.0090.01.

A Description

This special provision describes constructing planter curb special as shown in plans and in accordance to the pertinent provisions of standard specs 416 and 601. The work shall include all formwork, steel reinforcement, tie bars into existing concrete, and concrete finishing.

B Materials

The material furnished and used in the work shall conform to standard specs 416 and 601.

C Construction

The planter curb special shall conform to standard specs 416 and 601. The planter curb shall have a rubbed surface finish per standard spec 502.3.7.3. Tie new work to existing planter curb using tie bars driven or epoxied into the existing concrete as detailed in the plans.

D Measurement

The department will measure Planter Curb 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 item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Planter Curb Special	LF

Payment is full compensation for furnishing all materials, and for constructing.

61. Planter Curb Sacked Rubbed Surface Finish, Item SPV.0090.02; Planter Wall Sacked Rubbed Surface Finish, Item SPV.0090.03.

A Description

This special provision describes high pressure water power washing and performing a sacked rubbed surface finish of the existing planter curb and planter wall proposed exposed surfaces in accordance to the pertinent provisions of standard spec 502.

B Materials

The material furnished and used in the work shall conform to standard spec 502.

C Construction
Provide a high pressure water power washing and performing a sacked rubbed surface finish of the existing planter curb and planter wall proposed exposed surfaces in accordance to the pertinent provisions of standard spec 502.

D Measurement
The department will measure Planter Curb Sacked Rubbed Surface Finish and Planter Wall Sacked Rubbed Surface Finish by the linear foot measured along the front face, 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.0090.02	Planter Curb Sacked Rubbed Surface Finish	LF
SPV.0090.03	Planter Wall Sacked Rubbed Surface Finish	LF

Payment is full compensation for furnishing all materials; and for performing all work.

62. Pavement Marking, Special, Preformed Thermoplastic, Item SPV.0090.04.

A Description
This special provision describes furnishing and installing thermoplastic asphalt crosswalk patterns at locations shown on the plans and details.

Required Submittals
Product Data:
Submit manufacturer's technical data for each manufacture product, including certification that each product complies with specified requirements to Landscape Architect a minimum of 10 days prior to asphalt installation.

Mock-Up:
Furnish a sample panel for the approval of the Landscape Architect and the City of Janesville. If product other than basis of design is used, contractor shall submit two mock-up panels side by side showing all applicable finishes, color and texture expected in completed work. Consider the accepted mock-up as a minimum standard of workmanship to be matched or bettered throughout the Project. The mock-up maybe be constructed as part of the Project and, if approved, will be accepted as part of the Work. Remove mock-ups which fail to meet department's and Landscape Architect's approval.

Quality Assurance
The contractor performing the installation must be licensed and accredited by the manufacturer.

B Materials

Products/Basis of Design

Furnish interior thermoplastic treatment with DuraTherm Inlaid Pre-Cut Thermoplastic Pavement Marking System by Flint Trading, Inc (http://www.ennisflint.com/Products/TrafficScapes/DuraTherm). Furnish the DuraTherm pattern entitled Running Bond - 21; Color: White with reflectorized glass beads.

C Construction

Preparation

Prepare the pavement surface so that it is clean and free of all dust, silt, debris and chemical residue from de-icing materials. If de-icing material has been used on the road in the past, clean using pressure washing. Remove all loose material on the asphalt surface by mechanical brooming or blowing clean using a backpack blower or compressed air. Remove any difficult-to-remove dirt using pressure washing.

Pavement Joints and Seams

Avoid to the extent possible construction joints or seams in the HMA pavement in areas where this product is to be utilized. If joints or seams are unavoidable, they must be minimized.

Heating

Utilize manufacturer approved mobile heater(s) to elevate the temperature of both the HMA pavement and the thermoplastic without adversely affecting either. Utilize manufacturer approved portable jet heater(s) only for heating isolated areas. Direct flame torches will not be allowed.

Do not exceed 325°F on the surface temperature of the pavement as determined by an infra-red thermometer reading taken after the heater passes over the pavement surface. Adequately heat soak (soften) the pavement to a depth of least 1/2 inch, without burning the surface.

Installation

Follow the latest application procedures as issued by the manufacturer.

Utilize templates available or approved by the manufacturer for imprinting the specified pattern into the HMA pavement. Once the HMA pavement has reached imprinting temperature, place the templates in position and press into the surface using vibratory plate compactors. The top of the template is to be flush with the surrounding HMA pavement and can then be removed.

Place the pre-cut thermoplastic panels in position on completely dry and clean HMA pavement within the imprinted areas. Ensure the top of the inlaid thermoplastic is slightly lower than the surrounding HMA pavement surface. Re-apply heat, slowly raising the surface temperature until the thermoplastic panels start to liquefy and flow. Monitor the temperature continuously. Heat the thermoplastic panel to its full depth in order for the thermoplastic material to melt and create a bond with the underlying HMA pavement.

Once the thermoplastic panel has been liquefied to its full depth, remove the heat source and allow the surface to cool.

For low temperature applications, take extra care to ensure the thermoplastic is thoroughly heated to assure a bond between it and the underlying HMA pavement. Do not proceed with the installation process when the outside air temperature is below 40°F.

Do not install during periods of precipitation.

Protect the melted thermoplastic until it hardens. Do not permit any debris such as dust, water, pollen, etc., to come in contact with the melted thermoplastic.

The thermoplastic may be opened to traffic once it has cooled to 140°F.

Delivery
Deliver products to site in manufacturer's original, unopened containers and packaging. Upon delivery, examine packages immediately to ensure all products are complete and undamaged.

Storage
Store products in a protected, dry area in manufacturer's unopened containers and packaging bearing label clearly identifying manufacturer's name and brand. Store materials under cover, clear of the ground and protected from the weather.

Handling
Protect product's finish from damage during handling and installation.

D Measurement
The department will measure Pavement Marking Special, Preformed Thermoplastic 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.0090.04	Pavement Marking, Special, Preformed Thermoplastic	LF

Payment in full compensation for furnishing all materials; and for furnishing all surface preparation.

63. Ductile Iron Water Main 4 or 6-Inch, Item SPV.0090.05; Ductile Iron Water Main 8-Inch, Item SPV.0090.06; Ductile Iron Water Main 12-Inch, Item SPV.0090.07.

A Description

This special provision describes all work required for installation of new 6" - 12" ductile iron water main to replace existing 8" - 10" cast iron water main.

B Materials

Supply Class 52 ductile pipe and fittings (including all bends, tees, sleeves, etc.), as specified in Section 6.5.1 of the city specifications. This includes replacement fire service pipe of greater than 2".

Furnish valves, and hydrants according to Sections 6.4 and 6.7 of the city specifications and provide shop drawings for all pipe materials for approval.

C Construction

C.1 General Construction Methods

Pavement saw cutting is not required unless directed by the engineer. It is acceptable to crush/recycle any of the asphalt materials for reuse to be mixed in as trench backfill material (as approved by engineer). Existing asphalt may be zipped and pulverized material left in place, (until water main construction), and compacted to achieve firm surface for traffic movements. Do not remove existing surface materials more than one day ahead of trench excavation.

C.2 Water Main Replacement Work

Janesville Water Utility, or designated engineering, personnel shall oversee the operation of all existing valves, unless noted to be removed and replaced under this Contract, which will require closure as part of the associated installation work, prior to the start of work by the contractor. Notify affected residents of all service interruptions with proper 24 hour notice according to Section 6.1.4 of the city specifications. Service interruptions to affected businesses will require additional advanced notification, and this shall be coordinated through the engineer.

Supply and install the pipe and necessary fittings (including properly blocked or restrained joints); and bed, cover and backfill, pressure test, and disinfect the new water pipe according to requirements of Section 6.5.2 of the city specifications, unless modified below.

Uncover existing water main to which the new main is to be connected so as to allow for adjustment of line or grade to minimize use of fittings and avoid the need for extra fittings. Also uncover anticipated storm sewers, sanitary and water services and other pipes so as to allow for adjustment of line or grade to avoid the need for extra fittings.

The pipe shall be laid to proper line and grade as shown on the plan and staked in the field by the engineer, and installed, horizontally, to within approximately 2 - 4 feet of existing (parallel) main to allow for testing procedures. The pipe shall be properly bedded and covered according to referenced city specifications. Comply with this section for replacement of existing, greater than 2", fire service lines.

Trench backfill shall be placed in 1-foot lifts and mechanically compacted to 95% Modified Proctor Density in all areas beneath a paved surface. The trench shall be backfilled and compacted to final sub-grade elevation and material placed immediately after backfilling is completed. Maintain pedestrian access to affected residences and businesses during the main installation. If unsuitable material is encountered at pipe invert depths, as determined by the engineer, remove and replace this material as specified in Section 35. All excavated material (including recycled asphalt or crushed concrete) meeting specification shall be used as backfill.

At no time during construction shall a protective trench "shoe or box" be allowed to extend below the spring line of the water main pipe. As applicable, make arrangements with the Water Utility for tapping new mains to existing mains and services larger than 1" after the new mains are approved for service. These taps will be performed by the Water Utility at no cost to the contractor.

C.3 Water Main Pipe and Backfill Material Testing

Fill all new water mains, pressure test, and secure an approved bacteria test, according to Section 6.10 of the city specifications, prior to allowing the new pipe to be connected to the existing water system unless there are valves located at the tie-in location, whereby the valves can be closed tight during the test period. The engineer shall approve a testing plan from the contractor, for the new mains (per each block location), prior to start of the work for the purpose of minimizing service outages and maximizing public safety. Prior to connection to existing mains, the interior of the new "end" valves and/or associated new connection couplings/fittings shall be thoroughly sprayed with a 25 mg/l chlorine solution to provide disinfection. Flush all new water mains prior to taking a sample for the bacteria test. All flushed water shall be directed into the city storm sewer system, and tested as specified in Section 6.10.3 of the city specifications. This flushed water must be tested by the Water Utility, and chlorine concentrations approved, prior to entering storm sewer and this will be strictly enforced.

The new main shall be installed under existing mains (at intersections) and services without offset fittings unless otherwise directed by the engineer. Connections to existing pipes (including at intersections) can be made after new main is completely tested (both pressure and bacteria tests) and accepted by the engineer. All replacement water service connections and service reconnections shall be performed after the new main has been connected to existing main at one (or each) end(s) of the project. The taps of the new main can be done dry. Corp. stop service fittings shall be installed prior to main tests and pressure tested with the new main. The existing 6" to 10" mains (being replaced) shall be plugged at the disconnect points (including at existing valves and hydrants after their removal) upon final abandonment.

Temporary blow-off or other fittings may be required for testing purposes. The locations of any temporary testing materials shall be determined by the contractor and approved by the engineer. All temporary materials shall be considered incidental to the work being performed.

Testing of all connections to existing water system shall be by visual observance of leakage, by the engineer; at existing system pressure after main is placed back into service and prior to backfilling. Any leakage observed shall be repaired, as approved by the engineer, to completely stop any leakage.

Assure continuity between sleeved connections to existing/new mains (in same configuration as standard pipe joints), and the engineer must approve continuity on all sleeved connections. Continuity of the new main shall be tested by the contractor, with the engineer present, prior to placing main into service.

The engineer will perform density testing (as deemed necessary) on all backfill material used in trenches under or through existing streets or driveways. The backfill may be checked after each 12" lift is placed and compacted. The minimum density requirement will be 95% of Modified Proctor Density.

D Measurement

The department will measure Ductile Iron Water Main (Inch) by the linear foot, acceptably completed. The city will perform all measurement work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.05	Ductile Iron Water Main 4 or 6-Inch	LF
SPV.0090.06	Ductile Iron Water Main 8-Inch	LF
SPV.0090.07	Ductile Iron Water Main 12-Inch	LF

Payment is full compensation for furnishing all work described herein, and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work, and for which a separate bid item is not provided.

Payment includes trench excavation; supply and installation of new pipe; placement of bedding and cover materials; blocking; sheeting/shoring; making connections; anchoring pipe; placement and compaction of backfill; testing and disinfection of pipe/fittings; and other miscellaneous items necessary for a complete installation, and for which a separate bid item is not provided. Pipe connections on cross streets and hydrant leads on the replacement main work shall also be measured per linear foot of each pipe size (including tees, cross fittings, and locked joints) installed. The placing insulation as indicated on plans, or directed by the engineer, shall be incidental to the associated pipe work, and

include the insulation board and placement as specified in Section 6.9 of the city specifications.

64. Televising Sanitary and Storm Sewer, Item SPV.0090.08.

A Description

This special provision describes sanitary (including sanitary laterals) and storm sewer televising requirements at locations directed by the engineer.

B (Vacant)

C Construction

After completion of water main installations at all locations, the contractor shall arrange to televise, with sewer televising camera, any storm or sanitary (mains OR laterals) where invert elevations are within two vertical feet (over or under) of the new main. This is to confirm that affected sewer or lateral was not damaged from the excavated main or bored service. Lateral televising must be done from the main sewer utilizing a mainline lateral camera. This inspection shall be recorded on one DVD disk (no copies are needed) with written inspection report to be submitted to the engineer at the completion of the entire project. The televised inspection shall conform to Section 5.8.3 of the city specifications, with exceptions that any reference to Cassworks software (Section 5.8.3.3) has been deleted, and the 5% retainage requirement (Section 5.8.3.5) has been deleted.

D Measurement

The department will measure Televising Sanitary and Storm Sewer, acceptably completed, according to Section 5.8.3.5 of the city specifications, shall be per linear foot for storm or sanitary sewer (including storm leads and sanitary laterals) televised. Measurement shall be made only if the inspection is completed to verify that the pipe in undamaged from the new water main or service installation. The city will perform all measurement work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.08	Televising Sanitary and Storm Sewer	LF

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work, and for which a separate bid item is not provided.

65. Rectangular Rapid Flashing Beacon (RRFB) With Pedestrian Activation SPV.0105.01.

A Description

Furnish and install a Rectangular Rapid Flashing Beacon (RRFB) LED Light Assembly with Pedestrian Activation and Large LED Arrays (RRFB-XL™). The RRFB- XL™ shall be hardwired and pedestrian-activated by pushbutton as shown on the plans.

B Materials

1.0 General Requirements

RRFB-XL™ shall be in conformance with all applicable MUTCD standards and guidelines, and shall exceed the minimum requirements specified in FHWA Memorandum IA-11, Interim Approval for Optional Use of Rectangular Rapid Flashing Beacons. It shall consist of rapidly and alternately flashed rectangular yellow indications having LED-array based pulsing light sources, and shall be designed, located, and operated in accordance to the detailed requirements specified in Memorandum IA-11,

Interim Approval for Optional Use of RRFB and subsequent amendments as detailed herein.

1.1 Each RRFB-XL™ shall be a complete assembly consisting of but not limited to controller and electrical components (wiring), LED indications in a light bar, signage, sign mounting and pushbuttons.

1.2 An RRFB-XL™ assembly will have two light bars (mounted back-to-back facing dual directions) per pole.

1.3 Each Light Bar shall house two rapidly and alternately flashing rectangular yellow indications and two yellow side-mounted pedestrian indications, one on each end as shown in the plans. Each side-mounted pedestrian indication shall have an LED-array based light source. The LED-based pulsing light arrays shall be designed, located and operated in accordance to the detailed requirements as specified on the plans. Active vehicle indications shall be visible at distances over 1000 feet during the day and over 1 mile at night.

1.4 Individual components shall be replaceable independently of other components, equipped with approved terminal strips or wire-end molded connectors.

2.0 Functional Requirements

Per FHWA guidelines, RRFB shall be normally dark, shall initiate operation only upon pedestrian actuation, and shall cease operation at a predetermined time after the pedestrian actuation. The flash cycle duration should be based on the MUTCD procedures for timing of pedestrian clearance times for pedestrian signals: refer to MUTCD 2009 Section 4E.06 and any State-specified regulations.

As a specific exception to requirements for the flash rate of beacons as stated in 2009 MUTCD Section 4K.01, RRFBs shall use a much faster flash rate. Each of the two yellow vehicle indications of an RRFB shall have 70 to 80 periods of flashing per minute and shall have alternating, but approximately equal, periods of rapid flashing light emissions and dark operation. During each of its 70 to 80 flashing periods per minute, one of the yellow indications shall emit two medium rapid pulses of light and the other yellow indication shall emit four short rapid pulses of light followed by a long pulse.

The outside edges of the RRFB indications, including the Light Bar, shall not project beyond the outside edges of the W11-2, The flash rate of each individual yellow indication, as applied over the full on-off sequence of a flashing period of the indication, shall not be between 5 and 30 flashes per second, to avoid frequencies that might cause seizures.

2.1 Each RRFB-XL™ shall require 110VAC

2.2 Upon activation by ADA-compliant pushbutton, the two yellow indications in each RRFB-XL™ shall flash in a rapidly alternating "wig-wag" flashing sequence (left indication on, then right indication on).

2.3 The light intensity of the vehicle indications shall meet the minimum specifications of Society of Automotive Engineers (SAE) standard J595 (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated November 2008. Manufacturer Certification of Compliance shall be provided upon request.

2.4 When activated, all indications associated with a given crosswalk (including those with an advance crossing sign, if used) shall simultaneously commence operation of their alternating rapid flashing within 120msec, and shall cease operation at a predetermined time after the pedestrian actuation.

2.5 The duration of the flash cycle shall be programmable from 1 second to 24 hours, in increments of seconds, minutes and hours.

2.6 The Pedestrian indications shall be directed at and visible to pedestrians both waiting to cross and within the crosswalk, and it shall flash concurrently with the vehicle indications to give confirmation that the RRFB-XL™ is in operation.

2.7 The system shall include an actuation counter providing data that can be downloaded on-site to a laptop computer using DB9 or USB type cables.

2.8 Autonomy with a fully charged battery shall be up to 14-28 days without sun, dependent upon ambient temperature and number of activations.

3.0 Material Specification

The Manufacturer shall provide a complete solar-powered RRFB-XL™ assembly, consisting of but not limited to the controller and electrical components (including wiring and solid-state circuit boards), LED indications in a light bar, signage, sign mounting and pushbuttons.

3.1 Light Bar Housing and Indications

a. The Light Bar housing shall be constructed of durable, corrosion-resistant powder-coated aluminum with stainless steel fasteners.
b. Enclosed components shall be modular in design whereby any component can be easily replaced using common hand tools, without having to remove the housing from the pole.
c. All mounting hardware required for mounting the Light Bar housing shall be provided, and shall be powder coated black (RAL 9017).
d. Each of the two vehicle RRFB-XL™ LED indications shall be approximately 7.25" wide x 3" high.
e. A pedestrian LED indication, approximately 0.5" wide x 2.5" high, shall be side-mounted on both sides in the Light Bar housing, as shown in the plans, to be directed at and visible to pedestrians both waiting to cross and within the crosswalk.
f. The LEDs used shall be rated for a minimum 15-year life span.

3.2 Controller

a. The Controller shall be housed in a NEMA 4X rated aluminum enclosure, metal black (RAL 9017) in color, intended for indoor or outdoor use, primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, hose-directed water, and damage from ice formation.
b. The LED light outputs and flash pattern shall be completely programmable, with the capability to actuate RRFB-XL, RRFB, round LED signal beacons and LED-enhanced signs.
c. The flashing output shall have 70 to 80 periods of flashing per minute, during which one of the yellow indications shall emit two medium pulses of light and the other yellow indication shall emit four short rapid pulses of light followed by a long pulse. The output current shall be maintained as programmed for the duration of the pulse. The flashing output shall be programmable.
d. The Controller shall be reconfigurable if future MUTCD or State guidelines specify a different flash pattern.
e. The Controller shall be capable of storing input count data in preset intervals, with downloadable capabilities using optional Windows-based PC software program and standard RS232 programming cable.
f. The Controller shall be, in the unlikely event of failure, replaceable independently of other components.

3.3 Power Supply
   a. The input voltage ranges from 100 to 240 volts and is between 50-60 Hz.
   b. The maximum total output from this supply is 30 watts.

3.4 Pedestal Shaft
   a. Must mount on standard 4.5: OD aluminum pedestal pole with breakaway base.

3.5 Signs and Plaques
   a. All signs shall conform to MUTCD standards.
   b. All sign blanks and plaques shall be Federally specified .080 gauge, 5052 aluminum.
   c. Unless specified otherwise, sign sheeting shall be Fluorescent Yellow 3M™ DG3 diamond grade cubed or equivalent prismatic sheeting, with anti-graffiti overlay.
   d. All sign assemblies shall use provided anti-vandal fasteners and tools to mount components to sign, and sign to fixture.
   e. Crossing signs shall be W11-2 per MUTCD (4 signs).
   f. Crossing plaques W16-7P shall also accompany the crossing signs (4 signs).
   g. Pedestrian pushbutton instruction signs shall be furnished, at a minimum size of 5" x 7", to be mounted adjacent to or integral with each pedestrian pushbutton (2 signs).

3.6 Bulldog Pushbutton
   a. The Push Button shall be capable of continuous operation within a temperature range of -30º to 165ºF (-34º to 74ºC).
   b. The Push Button shall be ADA compliant, and shall operate as a normally open (n/o) circuit.
   c. Shall be Polara Bulldog 3 model (Black)

4.0 Warranty

The system shall be supported by a three-year manufacturer warranty.

C Construction

Assemble Rectangular Rapid Flashing Beacon (RRFB) With Pedestrian Activation per the manufacturer's recommendations. Mount the controller cabinet, signage, light bar and push buttons to the 10' traffic signal standard as shown on the plans per the manufacturer's requirements. Contact Aaron Guilbault at (920) 728-1792 for questions related to field installation of component items.

D Measurement

The department will measure Rectangular Rapid Flashing Beacon (RRFB) With Pedestrian Activation, completed in accordance to the contract and accepted, as a single complete lump sum unit of work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Rectangular Rapid Flashing Beacon (RRFB) With Pedestrian Activation	LS

Payment is full compensation for furnishing and installing the Rectangular Rapid Flashing Beacon (RRFB) With Pedestrian Activation including wire and all necessary mounting hardware and appurtenances.

66. Remove, Salvage, and Reinstall Traffic Signal Equipment, Main Street and Court Street Intersection, Item SPV.0105.02.

A Description

This special provision describes removing existing traffic signal equipment at the intersection of Main Street and Court Street, salvaging specific traffic signal equipment, and reinstalling that equipment at the same intersection in accordance to the pertinent provisions of standard specs 204, and 651 through 670 and as hereinafter provided.

B (Vacant)

C Construction

Removal of traffic signal equipment is not permitted until alternative traffic control devices, including signage, barrels, barricades and other devices as required in the plans. Arrange for the de-energizing of the traffic signals at the Main Street and Court Street intersection with the local electrical utility after receiving approval from the engineer that the existing traffic signals can be removed.

The following items are intended to be salvaged and reused on site:

- CB1: Radio Antenna and Antenna wire/cable. Salvaging equipment inside existing cabinet is included in the bid item "Traffic Signal Cabinet and Salvaged Controller", under this contract.
- SB1: Signal Head 4A, Signal Head 8D.
- SB2: Pole, Mast Arm, Signal Head 8B, Signal Head 6C, EVP Unit D and EVP detector cable.
- SB 3: Pedestrian Push Button.
- SB4: Concrete Pole should remain in place during construction.
- SB6: Pole, Mast Arm, Signal Head 4B, EVP Unit C and EVP detector cable.
- SB8: Pole, Mast Arm, Signal Head 2B, Signal Head 2C, EVP Unit A and EVP detector cable.

EVP Units that are removed and reinstalled will have the EVP cable wired inside the salvaged pole and mast arm. Salvage the existing EVP detector cable for reuse and reinstallation at the new locations. Installation of EVP detector cable shall be per standard spec 655.

All new holes in signal equipment required for reinstallation will be sealed with heat shrink tape or other waterproofing application.

All existing traffic signal equipment that is to be salvaged will be inspected by city personnel to determine which are suitable to be reinstalled. Prior to removal, contact Dave Lou at the city of Janesville at (608) 373-3407 at least three working days in advance to schedule inspection. Remove and dispose of any equipment the city does not want.

Items that are to be removed and not reused shall be completely disassembled out of traffic. Remove standards, poles, and arms from their concrete footings. Remove the transformer bases or pedestal from each pole. Remove the signals heads, mast arms, luminaries, wiring/cabling and traffic signal mounting devices from each signal standard, pole or arm. Ensure that access handhole doors and hardware remain intact. Dispose of any underground signal cable, street lighting cable, detector lead-in cable and all wires, including loop wire that is not intended for reuse at the Court Street intersection. All items shall be delivered to the City of Janesville City Services Center, 2200 US HWY 51 North. Contact Dave Lou at the City of Janesville at (608) 373-3407 at least five working days prior to delivery.

Any items damaged during removal or reinstallation of the equipment shall be replaced at the contractor's expense. Items removed that are intended to remain in place shall also be replaced at the contractor's expense.

D Measurement

The department will measure Remove, Salvage, and Reinstall Traffic Signal Equipment, Main Street and Court Street Intersection as a 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 items:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.02	Remove, Salvage, and Reinstall Traffic Signal Equipment, Main Street and Court Street Intersection	LS

Payment is full compensation for removing, salvaging, and reinstalling traffic signal equipment, , for delivering salvaged equipment not reused at the court street intersection, and for disposing of removed equipment that is not salvaged.

67. Remove, Salvage, and Reinstall Traffic Signal Equipment, Main Street and Milwaukee Street Intersection, Item SPV.0105.03.

A Description

This special provision describes removing existing traffic signal equipment at the intersection of Main Street and Milwaukee Street intersection, salvaging specific traffic

signal equipment, and reinstalling that equipment at the same intersection in accordance to the pertinent provisions of standard specs 204, and 651 through 670 and as hereinafter provided. The item also includes installation of additional traffic controller equipment within the existing cabinet.

B (Vacant)

C Construction

Removal of traffic signal equipment is not permitted until alternative traffic control devices, including signage, barrels, barricades and other devices as required in the plans. Arrange for the de-energizing of the traffic signals at the Main Street and Milwaukee Street intersection with the local electrical utility after receiving approval from the engineer that the existing traffic signals can be removed.

The following items are intended to be salvaged and reused on site:
CB2: Radio Antenna and Antenna wire/cable. Salvaging equipment inside existing cabinet is included in the bid item "Traffic Signal Cabinet and Salvaged Controller", under this contract.

SB13: Concrete Pole should remain in place during construction.

All new holes in signal equipment required for reinstallation will be sealed with heat shrink tape or other waterproofing application.

All existing traffic signal equipment that is to be salvaged will be inspected by city personnel to determine which are suitable to be reinstalled. Prior to removal, contact Dave Lou at the city of Janesville at (608) 373-3407 at least three working days in advance to schedule inspection. Remove and dispose of any equipment the city does not want.

Items that are to be removed and not reused shall be completely disassembled out of traffic. Remove standards, poles, and arms from their concrete footings. Remove the transformer bases or pedestal from each pole. Remove the signals heads, mast arms, luminaries, wiring/cabling and traffic signal mounting devices from each signal standard, pole or arm. Ensure that access handhole doors and hardware remain intact. Dispose of any underground signal cable, street lighting cable, detector lead-in cable and all wires, including loop wire that is not intended for reuse at the Court Street intersection. All items shall be delivered to the City of Janesville City Services Center, 2200 US HWY 51 North. Contact Dave Lou at the city of Janesville at (608) 373-3407 at least five working days prior to delivery.

Any items damaged during removal or reinstallation of the equipment shall be replaced at the contractor's expense. Items removed that are intended to remain in place shall also be replaced at the contractor's expense.

D Measurement

The department will measure Remove, Salvage, and Reinstall Traffic Signal Equipment, Main Street and Court Street Intersection as a 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 items:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.03	Remove, Salvage, and Reinstall Traffic Signal Equipment, Main Street and Court Street Intersection	LS

Payment is full compensation for removing, salvaging, and reinstalling traffic signal equipment, for delivering salvaged equipment not reused at the court street intersection, and for disposing of removed equipment that is not salvaged.

68. Traffic Signal Cabinet and Salvaged Controller, Main Street and Court Street, Item SPV.0105.04.

A Description

(1) This special provision describes furnishing and installing traffic signal a traffic signal cabinet, salvaging the existing traffic signal controller and other devices from the existing cabinet and installing them into the new cabinet, and providing new remaining electrical components to create a fully operational traffic signal cabinet in accordance the plans and as hereinafter provided.

(2) Submit a Certification of Compliance from the signal vendor, the contractor or the company that wired the cabinet certifying that the cabinet and equipment as furnished and installed, conform to the plan and specifications. Ensure that the certificate of compliance is on the letterhead stationery, signed by an authorized officer of the company, and notarized. Submit a copy to the engineer, and the City of Janesville.

(3) It is the responsibility of the contractor or his designee that all functions within the controller, cabinet, switches, and other timing parameters, and that all electrical and electronics components are in proper working condition. In addition, it is the responsibility of the contractor or his designee to ensure it meets the plan and the specifications, and shall demonstrate this to the engineer or his designee at the field location.

(4) After mounting the cabinet on the cabinet foundation, connect all the field wiring inside the controller cabinet and test the signal circuits for correct operation. Connect and test the signal circuits outside the controller cabinet as directed by the engineer. Connecting and testing signal circuits shall be considered part of this item of work.

(5) The completed cabinet at the intersection shall perform in accordance to the standard specifications, the plan details, and special provisions once the field wiring is connected. It shall also be the responsibility of the contractor to have the person responsible for wiring the cabinet present at the location when the field wiring is connected to the cabinet wiring. In addition, the contractor assumes liability for any damage or damage due to malfunctions or improper wiring.

(6) The existing controller to be salvaged is a Siemens/Eagle model EPAC3608M34. Confirm the existing controller is fully functional, compliant with these specifications, and capable of being a fully traffic actuated, solid state, digital microprocessor controller, providing the number and sequence of phases, overlaps, and any special logic as described herein and shown on the accompanying plan.

(7) The controller shall be fully programmed and shall be mounted in a control cabinet to operate as a complete and functioning intersection traffic signal control system.

(8) The following additional items shall be salvaged from the existing cabinet:

- Conflict Monitor
- Load Switches
- Flash Transfer Relay
- Flasher Module
- EVP Discriminator

Confirm that the items to be salvaged are fully functional and compliant with these specifications. If items are not compliant with these specifications, or additional items are necessary to meet the requirements of these specification, contact Dave Lou, City of Janesville at (608) 373-3407 to review the need for additional or replacement equipment. Provide at least 24 hours advance notice of the need for review of equipment.

The equipment items included in the cabinet when completed shall include, but not necessarily limited to, cabinet, microprocessor controller, monitor, detector amplifiers, power supply, power distribution panel, interior cabinet wiring, and other associated electrical and electronic equipment interior to the control cabinet that is necessary to provide the type of operation described in these specifications.

(9) Dual ring, programmable for both single and dual entry concurrent timing, eight-phase frame or equivalent shall be provided. Volume density and pedestrian timing shall be provided for all phases. MUTCD flashing capability shall be provided. All controls shall be in accordance to the accompanying plans and with NEMA Standards Publication No. TSl-1976 including Revisions No. 1 and No. 2.

(10) The intersection controller unit shall be capable of up to 8-phase operation plus four (4) programmable overlaps regardless of whether preemption, coordination or the special programming is used. Wire the intersection cabinet for a minimum of twelve and include six 3-circuit load switches.

B Electrical and Operational Aspects

B.1 Buffering

(1) Internally buffer all logic circuit inputs to withstand transients and noise, such as might result from normal usage, without damage to any mechanism components.

B.2 Timing Features

(1) All controller timing parameters shall be fully programmable from the front panel using switches and/or keyboard inputs, and memory storage features shall be nonvolatile under power off conditions for at least 30 days. The locking, nonlocking detection mode and recall switches shall also be accessible on the front panel.

B.3 Minimum Green Timing

(1) The passage timer shall time concurrently with the minimum green timer, so that the duration of the minimum green time is directly adjustable and is independent of the passage time setting.

B.4 Dual Ring Timing

(1) In the dual ring application, no more than two phases shall be permitted to time concurrently, and no more than one phase per ring. The controller shall 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. The controller shall service calls on a single entry basis, and both rings shall cross the barrier simultaneously in accordance to the following logic: (a) Phases timing concurrently shall terminate simultaneously if both have a gap out due to excessive time between actuations. (b) Phases timing concurrently shall terminate simultaneously if both have a maximum time out. (d) 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.

B.5 Manual (Police) Control

(1) 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.

B.6 Red Revert

(1) Provide an adjustable red revert control to assure adequate red display when recycling a phase during call-away or red rest mode operation. A call for service to a different phase shall be preceded by an all-red clearance interval, as programmed.

B.7 Coordination

(1) 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-Mode per controller	External Start per controller

B.8 Minimum Safe Timings Control

(1) 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; minimum walk - 4.0 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.

B.9 Indicator Lights and Switches

(1) Provide indicator lights to show the status of each signal phase on. Indicator lights shall also be used to show interval status, phase termination information, and presence of vehicular and pedestrian calls for each phase. Also provide an indicator light to show the status of the backup battery charging circuit.

(2) The controller shall have an on off switch and fuse for AC power.

B.10 Data Display

(1) If keyboard entry is supplied, the front panel shall contain a display panel consisting of LED display characters. The face of the display shall be scratch, chemical, and solvent resistant. In the case of writing data or parameters into the controller, there shall be a visual indication that the data has been accepted. The number of characters shall be adequate to read or write all data and parameters in decimal format together with a data descriptor in either alpha numeric format, or thumbwheel switch display.

B.11 Diagnostic Program

(1) A diagnostic program shall be prepared by the manufacturer of the controller unit that will demonstrate the proper operation of all the inputs, outputs, controls and indicators in the controller, and shall have visual conformation on the front panel. The diagnostic program shall be either resident in the controller or furnished as a separate plug in module. A flow chart and listing of the diagnostic routine shall be furnished with the controller unit.

B.12 Maintenance of Controller

(1) For ease of service, the controller shall be divided to a minimum of the following separate circuit boards:
   1. CPU/Memory
   2. Input/Output
   3. Front Panel
   4. Power Supply

(2) Each board must be easily removable without requirements for special tools.

(3) The microprocessor supplied shall be the type that has a Fluke Pod that is compatible.

(4) All electronic components must be removable by a PACE (model PPS-5) solder station and all integrated chips over 20 pins must be on sockets.

C Monitoring

(2) Salvage the existing monitor. Ensure the monitor is a NEMA PLUS monitor with all components and circuitry, independent to the controller and having the capacity to handle a minimum of 12 channels. Verify the monitor property detects conflicting indications, controller voltage drops, and the absence of reds as follows:
   1. Conflicting indications shall cause the monitor to place the intersection in a flashing mode of operation. The monitor shall maintain the flashing mode until manually reset, regardless of 110 VAC power to the conflict monitor.
   2. The +24 VDC cabinet power source shall be monitored by the conflict monitor. If that voltage drops to an unsatisfactory level, the monitor shall cause the controller to revert to flashing mode. Upon resumption of normal voltages, the controller shall resume normal stop and go operation without the necessity of manual resetting.
   3. The absence of any required red signal voltage at the field connection terminals in the controller assembly shall cause the monitor to place the intersection in a flashing mode of operation. The monitor shall maintain the flashing mode until manually reset.
   4. After power interruption (exceeding 457 +/- 25 milliseconds) to the controller assembly a flashing period (4 to 10 seconds adjustable) shall precede the start up (initialization) sequence. This feature can be resident in either the monitor or the controller.
   5. The flash circuit shall be wired in a failsafe manner so that the intersection will revert to and remain in flashing mode whenever and for as long as either the controller mechanism or the monitor is disconnected.
   6. Indicator lights shall be: a) an indicator for each channel shall be provided with latch status of failure, b) +24V light inputs, c) conflict light, d) conflict monitor power light and program board ajar light, e) power interrupt after failure light, f) red failure light.

7. G or W vs. Y signals on the same channel: This function shall be enabled on a per unit basis. When enabled, the conflict monitor shall be capable of monitoring for green or walk versus yellow indications active on one channel. It shall be recognized as a failure if the condition exits for 850 +/- 150 milliseconds. This failure shall always be considered a latched failure when enabled.
8. G, W, or Y vs. R signals on the same channel: This function shall be enabled on a per channel basis. When enabled, the conflict monitor shall be capable of monitoring for green or walk or yellow versus red indications active on one channel. It shall be recognized as a failure if the condition exists for 850 ±150 milliseconds. This failure shall always be considered a latched failure when enabled.

D Terminal Facilities

(1) Terminal facilities shall consist of all devices external to the controller unit that are necessary to complete the intersection control. Terminal facilities supplied shall be protected by dual 30-amp circuit breakers. The dual 30-amp breakers shall feed an evenly split signal bus supplied through bus relays and radio interference line filters. Bus relays, in all cases, shall be mercury type contractors and shall not be jack mounted. Terminal facilities shall also include applicable load switch panels of sufficient capacity to accommodate 8 vehicle phases, 4 pedestrian phases, and 4 overlap phases and shall include a minimum of 6 solid state 3 circuit load switches with visual indicators. Flash transfer relays and two double circuit flashers shall also be provided. The internal wiring in the load switch panels shall be insulated wiring of sufficient size or the individual outputs fused so that the wiring will not be damaged by shorted output light circuits. Printed circuits in the load switch panels will not be acceptable.

(2) Use terminal strips to terminate controller cable, signal head cables and vehicle and pedestrian detector cables. Terminate all controller inputs and outputs on an interface panel. All interface and output terminal connections shall be the screw down type.

(3) Fuse all interconnect terminal facilities to incoming lines.

E Cabinet Switches

(1) Locate the following switches inside the cabinet on a maintenance panel:
   a. Controller On/Off
   b. Cabinet Light
   c. Stop Time (Three Position)

POSITION	LABEL SWITCH	FUNCTION
Upper	Stop Time	Place stop time on the controller
Center	Run	Remove the stop time input to the controller
Lower	Normal	Connects the Monitor to the controller stop time input

(2) Provide switches for all vehicle phases and all even pedestrian phases.

(3) Locate the following switches behind the Police access door:
   a. Signal/Off
   b. Flash/Normal

(4) The above switches shall function as follows:

Signal		Off
Flash	Signals Flash	Signals Dark
Normal	Signals Normal	Signals Dark

(5) Manual Detector Operation. Provide three position switches external to the controller that will permit manual detector calls and manual detector disconnect for each phase independently. The switches shall be spring loaded and shall rest in the center (non-operative) position. The switches shall be appropriately labeled and shall operate as follows:

Upper Position:	Spring loaded:	Disconnect detector
Center Position:	Normal detector operation	
Lower Position:	Spring loaded:	Test call is placed to controller.

F Cabinet and Cabinet Equipment

(1) Furnish the controller completely housed in a door-in-door ground mounted (without anchor bolts) metal cabinet of minimum size 1115 mm wide, 685 mm deep, and 1495 mm high.

(2) Provide a cabinet of clean-cut design and appearance. The size of the cabinet shall be such as to provide ample space for housing the controller, and all of the associated electrical devices which are to be furnished with the controller, together with any other auxiliary devices herein specified.

(3) All cabinets shall have the following:
1. A 15-amp circuit breaker for auxiliary equipment.
2. A 2-pole 20-amp circuit breaker for street lighting, photo eye, and contactor.
3. A valve type surge protector, as manufactured by Joslyn, catalog #L9200-10; General Electric, catalog #9L15DCB002; or approved equal, shall be mounted internally within the traffic signal cabinet and shall be connected across the load terminals of the circuit breakers. A General Electric Varistor, catalog #V130PA20A, shall be installed at the load terminals of each circuit breaker from the hot line to the grounded current carrying neutral conductor.
4. Incandescent light socket.
5. Solid state jack mounted NEMA flasher(s) with visual indicators and completely wired base, rated for at least 10 amps per circuit at 74 degrees C.
6. Control switches, including controller power switch, stop time switch, cabinet light switch, and emergency flash switch.
7. All switches specified in Section C-8 and F.
8. Necessary fuses and circuit breakers.

9. All wiring harnesses including detector harnesses. Loop detector harness connector shall be MS-3106B018-lS fully wired terminals I and J which shall go to separate isolated terminals. One loop harness shall be provided for each of the phases (i.e. 01 - 08).
10. **Duplex power receptacle**. A 120 VAC 20 amp, NEMA 5-20R GFl convenience outlet shall be mounted in each cabinet for energizing equipment or tools. The outlet shall be fuse protected.
11. **Radio interference filter**. Each control cabinet shall be equipped with a single radio interference suppressor of sufficient ampere rating to handle the load requirements. The RIS shall be installed at the input power point. It shall minimize interference in both the broadcast and the aircraft frequencies, and shall provide a maximum attenuation of 50DB over a frequency range of from 200KHZ to 75MHZ, when used in connection with normal installations. The radio interference suppressor shall be hermetically sealed in a substantial metal case that shall be filled with a suitable insulating compound. The terminals shall be nickel-plated brass studs of sufficient external length to provide space to connect two No. 8 AWG wires and shall be so mounted that they cannot be turned in the case. Ungrounded terminals shall be properly insulated from each other, and shall maintain a surface leakage distance of not less than 6.35 mm between any exposed current conductor and any other metallic parts. The terminals shall have an insulation factor of 100-200 megohms dependent upon external conditions. The RIS shall not be rated less than 35 amperes. The RIS shall be designed for operation on 115 VAC +/- 10%, 60HZ, single-phase circuits, and shall meet the standards of UL and Radio Manufacturer's Association.
12. **Cabinet grounding**. In all controller cabinets and auxiliary cabinets, the AC common, the logic ground, and the chassis ground shall be isolated from each other the same as detailed by NEMA Standard.
13. **Suppressors**. Each 120 VAC circuit that serves as inductive device, such as a pan motor or a mechanical relay, shall have a suppressor to protect the controller's solid state devices from excessive voltage surges. Such suppressors shall be in addition to the surge protector at the input power point.

(4) All conductors in the cabinet shall be number 22 AWG or larger, with a minimum of 19 strands, and conforming to military specifications, Mil-W-16878D, Type B or D, vinyl nylon jacket, 600 volt, 105 degree C. All cabinets shall be factory wired.

(5) The cabinet shall provide weather protection and forced ventilation, air filters and heaters, with adjustable thermostat switches, and comply with the environmental and operating standards outlined in NEMA Specification TSI-1-1976. The cabinet shall provide reasonable vandalism protection. Provide access doors that have latches and a Corbin lock, dust cap, and key change IR6380. The small door shall be provided with standard police locks. The heater supplied shall have adjustable thermostat setting which varies from 0 degrees to 40 degrees Celsius.

(6) **Forced Ventilation**. Ventilate the controller cabinet containing solid-state equipment by means of a 120 VAC, 60HZ, tube axiac compact type fan. The fans free delivery airflow shall be greater than 2.83 cubic meter per minute. The magnetic field of 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 7 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 32 to 49 degrees Celsius. The fan shall run until the cabinet temperature decrease to approximately 17 degrees C. below the turn on temperature setting. The fan shall be fused.

(7) Provide metal shelves to support the controller and external equipment. The controller shall be located on the top shelf and not less than 965 mm above the bottom of the cabinet. There shall be a minimum of 250 mm vertical height for detector units.

(8) Locate buss and flash transfer relays, flashers, load switches, circuit breakers, and interference filters on a standard panel consistent with the intersection plan. Design shall facilitate field inspection and maintenance accessibility without excessive disassembly or special tools.

(9) Prime all inside and outside surfaces of the cabinet inside and outside surfaces with phosphate treatment and primer. After priming, give all exterior surfaces a minimum of 2 coats of rust resistant silver grey enamel; interior surfaces shall be furnished with rust resistant high gloss white enamel.

(10) Neatly fold and cap any cables, wires or circuits that are not being used. These wires shall be neatly tied and stowed away in or on the terminal facilities.

(11) Terminal facilities arrangement shall be in a fashion so that trouble shooting of load bay or behind the load bay can be accomplished with simple tools. This means that the load bay will be hinged so that it can be dropped down for ease of maintenance. There will be sufficient slack in the load bay wiring to allow for dropping the load bay.

(12) Protect all control cables, i.e., detector harnesses, controller harnesses, harnesses which connect manual/vehicle detector switches, by a nylon jacket or provide equivalent protection to prevent any contact with cabinet metal shelves, doors and any other sharp corners.

(13) If any branch circuit wiring or control wiring does not conform to the wire specifications, the supplier will be considered as not meeting the specifications and proper corrective action will be exercised against the supplier.

(14) Provide a 4 input PED isolation circuit to isolate controller logic ground from the field wiring. Outputs from the PED isolator shall be connected to phases 2,4,6,8.

G Solid State Load Switches

(1) Salvage existing load switches. Confirm that the load switches meet the requirements of NEMA TSl-Part 5 for three circuit load switches.

(2) Each load switch shall contain three individually replaceable, molded case, solid state relay modules. Each relay module shall utilize optical isolation between the control and the load circuits. The module shall have the functions and terminal assignments as specified in NEMA TSl-Part 5.

(3) Each panel of load switches shall either be rack mounted or shall have a switch support bracket extending across the entire length of the switch panel.

(4) The load bay arrangement from left to right in the cabinet shall be as described below:
1. Vehicular Phasing shall be groups first - 0l, 02, 03, 04, 05, 06, 07, 08.
2. Pedestrian Phasing shall be followed second - 02, 04, 06, 08.
3. Any other special phasing shall be grouped last.

H Equipment List and Drawings

(1) Submit detailed shop drawings of the control cabinet, equipment layout drawings and wiring diagrams of all equipment installed in the controller cabinet to the department for approval. Two sets of cabinet wiring diagrams shall be contained in a heavy duty clear plastic envelope mounted on the inside of the front door.

(2) At the time of delivery, furnish one set of instruction manuals and an itemized price list for each type of equipment, their subassemblies, and their replacement parts. The instruction book shall include the following information: a) Table of Contents, b) operating procedure, c) step-by-step maintenance and troubleshooting information for the entire assembly, d) circuit wiring diagrams, e) pictorial diagrams of parts locations, f) parts numbers, and g) theory of operation. The instructional manuals shall include itemized parts lists. The itemized parts lists shall include the manufacturer's name and parts number for all components (such as IC', diodes, switches, relays, etc.) used in each piece of equipment. The list shall include cross references to parts numbers of other manufacturers who make the same replacement parts.

I Supplier Warranty

(1) The contractor shall certify that the equipment meets the required specification and shall supply a complete catalog description. The following documents shall also be provided.
1. A warranty statement that stipulates that equipment to be supplied shall be warranted for two years from the date of purchase.
2. Operations manuals.
3. Maintenance manuals.
4. Schematic diagrams.
5. Component and equipment locations within the cabinet.

(2) If a malfunction in the controller unit, or its auxiliary equipment occurs during the warranty period, the supplier shall, within 24 hours after notification (excluding Saturday and Sunday), furnish a like controller unit module, or auxiliary equipment, for use while the warranted unit is being repaired. The isolation of any malfunction during the warranty period shall be the responsibility of the supplier. After the supplier has repaired

and returned the equipment, the department shall then return the spare component to the supplier.

J Preemption

J.1 General

(1) These specifications detail a preemptor program for use with 2 through 8-phase-actuated controller.

(2) The preemptor shall be capable of being adaptable to meet the various types of applications such as railroad, fire station, and bridge preempts.

(3) The preemptor shall be internal to the controller and shall not alter controller capability or interchangeability under normal operation. The preemptor shall be completely programmable by the user.

J.2 Preempt Program

(1) Preempt Registration. The preempt call input shall initialize preempt registration and start preempt sequence unless a priority call input is activated which would treat the current controller preemptions state as normal operation and reinitiate call registration.

(2) Preempt Delay. As soon as the preempt call is registered the preempt delay will begin timing unless preempt delay is set zero or preempt delay omit was active during preempt call registration. Delay shall be programmable from 0 to 255 seconds minimum.

(3) As soon as preempt delay is timed out, current running phases not next to be common in preempt sequence are cleared. If the running phases are green and must be cleared, special programmable values of minimum green, walk and pedestrian intervals will time normal times. Concurrently a special preempt clearance is generated. This clearance is designed for advance track signals and any overlaps that may be green and require yellow clearance.

(4) Entry Clearance Phase(s) Select. Two sequential phases or phase pairs shall be available to be run as programmable fixed time intervals as an entry sequence. Two entry options shall be available, each programmable. The entry sequence shall be capable of being omitted entirely.

(5) Dwell Sequence. After the entry sequence, the preemptor shall enter the dwell sequence. During the dwell sequence the controller shall cycle between selected phases on a pre-timed or actuated basis. Pedestrian phasing may be normal or omitted entirely. When the dwell sequence is entered, a preempt dwell output shall be generated. The preemptor shall remain in dwell for the length of the dwell extension timer which shall be capable of being held in reset by the preempt call input. Dwell extension shall be omittable by setting the timer to zero.

(6) Exit Sequence. After leaving dwell, the controller shall enter one or two programmed exit phases(s) or phase pairs sequences. The sequence will time programmed minimum green and place a vehicle call on all phases not omitted. After timing exit phase minimum green the controller shall time and sequence normally.

K Time Base Coordination

(1) These specifications detail a Time Base Coordinator program for use with 2 through 8-phase actuated controller.

(2) The units shall allow traffic control equipment to be coordinated without requiring the use of interconnection cables. The units shall coordinate traffic control equipment based on signals from a precise time base which will allow output control signals to be changed at the proper pre-programmed time to achieve the coordinated operation of an intersection with other intersections or the desired operation of an isolated intersection. The coordinators may also used a programmer for a master intersection controller which in turn is interconnected with secondary intersection controllers. The units shall also be capable of providing a command for MUTCD flash, and shall allow a full year program to be initiated and carried out without the necessity of field adjustment for anticipated special events, etc.

(3) The time base coordinator shall be internal to the controller and shall not alter controller capability or interchangeability under normal operation. The time base coordinator shall be completely programmable by the user.

L Loop Detector Amplifiers

L.1 Materials and Construction Methods

(1) All loop detector amplifiers supplied shall be two channel shelf-mounted units with digital output timing, and sequential scanning. The amplifier shall operate in compliance with all the requirements specified herein, when connected to an inductance loop plus lead-in of from 0 to 1000 microhenries with a loop parameter as low as 5.0 at the amplifiers operating frequency.

(2) Each channel shall be self-tuning and shall be fully operational within one minute after power up. After a power interruption, the channel shall automatically return to normal operation. Two conventional single channel front panel mounted MS3102a18-lP connectors for each amplifier shall be provided.

(3) Each channel shall have a fail-safe design such that if the loop sensor circuit is broken, the channel shall output a continuous vehicle call.

(4) Couple the loop sensor to the channel input circuitry through isolation transformers. This arrangement shall provide continued operation of the channel even if the loop sensor in the street develops resistive leakage or becomes grounded.

(5) Provide lightning protection for each amplifier as an integral part of its own circuitry. The protection shall enable the detector to withstand the discharge of a 10 microfarad capacitor, charged to ±1000 volts. The discharge shall be applied directly across the detector loop input pins with no loop load present. The protection shall also enable the detector to withstand the discharge from a 10 microfarad capacitor, charged to l to 2000 volts. The discharge shall be applied directly across either the detector loop input pins or across either side of the loop input pins to earth ground. For this test, the detector chassis shall be grounded and the detector loop input pins shall have a 5.0 ohm dummy resistive load connected across them.

(6) The detector circuits shall be so designed that changes due to environmental drift and applied power shall not cause an actuation. The detectors shall be capable of compensating or tracking for an environmental change of up to but not exceeding 1 x 10 minus 3% charge in inductance per second. This requirement must be met within two hours after initial application of operating power.

(7) Each detector channel shall have a minimum of three sensitivity settings and these shall be front panel selectable. The most sensitive setting shall respond to an inductance change of 0.02%. The least sensitive setting may be chosen by the manufacturer such that accurate and repeatable occupancy measurements may be obtained. This setting must cause the detector channel to respond to a 0.14-0.4% charge in inductance.

(8) Each detector channel shall have a front panel mounted indicator to provide a visual indication of each vehicle detection. A detector channel shall not cross talk with any other channel within the same module.

(9) The unit shall operate over input voltage from 95VAC to 135VAC and shall neither originate nor be sensitive to electrical transients in excess of proposed NEMA standards. Provide varistors between power lines to limit transient voltages.

(10) Provide extension and delay timing for each channel independently as described below:

L.2 Delay Timing

(1) Delay detector output for selected interval of l to 30 seconds in 1-second increments. Each new detection restarts the delay timer.

L.3 Extension Timing

(1) Extends vehicle calls up to 7.75 seconds in 0.50 second increments.

L.4 Green Gating

(1) Green signals from the controller shall be wired to the detector to modify timing functions. When green is true, delay timing is disabled. When green is false, extension timing is disabled. The green input signals may be DC or direct line voltage AC.

L.5 Smart Indicators

(1) Normal indicator operation is provided when neither timer is active. Delay and extensions are distinguished by 4 hertz and 16 hertz flashing respectively.

(2) Provide the necessary Loop Detector Amplifiers as required on the plan.

M Controller Operation

(1) Consistent with customary trade practices, the manufacturer shall furnish a warranty for all electrical or mechanical equipment described herein. The contractor shall turn such warranty over to the owner for potential dealing with the guarantor.

(2) If the contractor is the guarantor, he specifically waives the requirements of Section 289.14(2), Wisconsin Statutes, and agrees as a condition of the contract that the owner may maintain an action against him at anytime during the warranty period for recovery of damages which the state may have sustained by reason of the failure of the contractor to comply with the provisions of the warranty provided to the owner.

(3) During the installation and testing of the controller, the contractor shall provide, at his own expense, a competent representative to oversee, direct and manage the installation and testing of the controller. In the final stages of the installation and testing, the manufacturer's representative shall be available at the job site for consultation until such time as the controller operation is tested and accepted.

(4) If a malfunction in the controller unit or its auxiliary equipment occurs during the warranty period, the supplier shall, within 24 hours after notification (excluding Saturday and Sunday), furnish a like controller unit, module, or auxiliary equipment, for use while the warranted unit is being repaired. The isolation of any malfunction and the repair and/or replacement of any device within the warranty period shall be the responsibility of the supplier. After the supplier has repaired and returned the equipment, the county shall return the spare component to the supplier.

N Measurement

(1) The department will measure Traffic Signal Cabinet and Salvaged Controller, Main Street and Court Street as a single complete lump sum unit of work, acceptably completed in accordance to the contract.

O Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.04	Traffic Signal Cabinet and Salvaged Controller, Main Street and Court Street	LS

(2) Payment is full compensation for furnishing and installing the traffic signal cabinet, salvaging and reinstalling the signal controller and conflict monitor together with cabinet, switches for flashing operation, and supplying all other electrical components

and fittings as are necessary to assure that the controller will perform the said functions.

69. Traffic Signal Cabinet and Salvaged Controller, Main Street and Milwaukee Street, Item SPV.0105.05.

A Description

(1) This special provision describes furnishing and installing traffic signal a traffic signal cabinet, salvaging the existing traffic signal controller and other devices from the existing cabinet and installing them into the new cabinet, and providing new remaining electrical components to create a fully operational traffic signal cabinet in accordance the plans and as hereinafter provided.

(2) Submit a Certification of Compliance from the signal vendor, the contractor or the company that wired the cabinet certifying that the cabinet and equipment as furnished and installed, conform to the plan and specifications. Ensure that the certificate of compliance is on the letterhead stationery, signed by an authorized officer of the company, and notarized. Submit a copy to the engineer, and the City of Janesville.

(3) It is the responsibility of the contractor or his designee that all functions within the controller, cabinet, switches, and other timing parameters, and that all electrical and electronics components are in proper working condition. In addition, it is the responsibility of the contractor or his designee to ensure it meets the plan and the specifications, and shall demonstrate this to the engineer or his designee at the field location.

(4) After mounting the cabinet on the cabinet foundation, connect all the field wiring inside the controller cabinet and test the signal circuits for correct operation. Connect and test the signal circuits outside the controller cabinet as directed by the engineer. Connecting and testing signal circuits shall be considered part of this item of work.

(5) The completed cabinet at the intersection shall perform in accordance to the standard specifications, the plan details, and special provisions once the field wiring is connected. It shall also be the responsibility of the contractor to have the person responsible for wiring the cabinet present at the location when the field wiring is connected to the cabinet wiring. In addition, the contractor assumes liability for any damage or damage due to malfunctions or improper wiring.

(6) The existing controller to be salvaged is a Siemens/Eagle model EPAC3608M34. Confirm the existing controller is fully functional, compliant with these specifications, and capable of being a fully traffic actuated, solid state, digital microprocessor controller, providing the number and sequence of phases, overlaps, and any special logic as described herein and shown on the accompanying plan.

(7) The controller shall be fully programmed and shall be mounted in a control cabinet to operate as a complete and functioning intersection traffic signal control system.

(8) The following additional items shall be salvaged from the existing cabinet:

- Conflict Monitor
- Load Switches
- Flash Transfer Relay
- Flasher Module
- EVP Discriminator

Confirm that the items to be salvaged are fully functional and compliant with these specifications. If items are not compliant with these specifications, or additional items are necessary to meet the requirements of these specification, contact Dave Lou, city of Janesville at (608) 373-3407 to review the need for additional or replacement equipment. Provide at least 24 hours advance notice of the need for review of equipment.

The equipment items included in the cabinet when completed shall include, but not necessarily limited to, cabinet, microprocessor controller, monitor, detector amplifiers, power supply, power distribution panel, interior cabinet wiring, and other associated electrical and electronic equipment interior to the control cabinet that is necessary to provide the type of operation described in these specifications.

(9) Dual ring, programmable for both single and dual entry concurrent timing, eight-phase frame or equivalent shall be provided. Volume density and pedestrian timing shall be provided for all phases. MUTCD flashing capability shall be provided. All controls shall be in accordance to the accompanying plans and with NEMA Standards Publication No. TSl-1976 including Revisions No. 1 and No. 2.

(10) The intersection controller unit shall be capable of up to 8-phase operation plus 4 programmable overlaps regardless of whether preemption, coordination or the special programming is used. Wire the intersection cabinet for a minimum of twelve and include six 3-circuit load switches.

B Electrical and Operational Aspects

B.1 Buffering

(1) Internally buffer all logic circuit inputs to withstand transients and noise, such as might result from normal usage, without damage to any mechanism components.

B.2 Timing Features

(1) All controller timing parameters shall be fully programmable from the front panel using switches and/or keyboard inputs, and memory storage features shall be nonvolatile under power off conditions for at least 30 days. The locking, nonlocking detection mode and recall switches shall also be accessible on the front panel.

B.3 Minimum Green Timing

(1) The passage timer shall time concurrently with the minimum green timer, so that the duration of the minimum green time is directly adjustable and is independent of the passage time setting.

B.4 Dual Ring Timing

(1) In the dual ring application, no more than two phases shall be permitted to time concurrently, and no more than one phase per ring. The controller shall 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. The controller shall service calls on a single entry basis, and both rings shall cross the barrier simultaneously in accordance to the following logic: (a) Phases timing concurrently shall terminate simultaneously if both have a gap out due to excessive time between actuations. (b) Phases timing concurrently shall terminate simultaneously if both have a maximum time out. (d) 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.

B.5 Manual (Police) Control

(1) 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.

B.6 Red Revert

(1) Provide an adjustable red revert control to assure adequate red display when recycling a phase during call-away or red rest mode operation. A call for service to a different phase shall be preceded by an all-red clearance interval, as programmed.

B.7 Coordination

(1) 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-Mode per controller	External Start per controller

B.8 Minimum Safe Timings Control

(1) 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; minimum walk - 4.0 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.

B.9 Indicator Lights and Switches

(1) Provide indicator lights to show the status of each signal phase on. Indicator lights shall also be used to show interval status, phase termination information, and presence of vehicular and pedestrian calls for each phase. Also provide an indicator light to show the status of the backup battery charging circuit.

(2) The controller shall have an on off switch and fuse for AC power.

B.10 Data Display

(1) If keyboard entry is supplied, the front panel shall contain a display panel consisting of LED display characters. The face of the display shall be scratch, chemical, and solvent resistant. In the case of writing data or parameters into the controller, there shall be a visual indication that the data has been accepted. The number of characters shall be adequate to read or write all data and parameters in decimal format together with a data descriptor in either alpha numeric format, or thumbwheel switch display.

B.11 Diagnostic Program

(1) A diagnostic program shall be prepared by the manufacturer of the controller unit that will demonstrate the proper operation of all the inputs, outputs, controls and indicators in the controller, and shall have visual conformation on the front panel. The diagnostic program shall be either resident in the controller or furnished as a separate plug in module. A flow chart and listing of the diagnostic routine shall be furnished with the controller unit.

B.12 Maintenance of Controller

(1) For ease of service, the controller shall be divided to a minimum of the following separate circuit boards:
   1. CPU/Memory
   2. Input/Output
   3. Front Panel
   4. Power Supply

(2) Each board must be easily removable without requirements for special tools.

(3) The microprocessor supplied shall be the type that has a Fluke Pod that is compatible.

(4) All electronic components must be removable by a PACE (model PPS-5) solder station and all integrated chips over 20 pins must be on sockets.

C Monitoring

(2) Salvage the existing monitor. Ensure the monitor is a NEMA PLUS monitor with all components and circuitry, independent to the controller and having the capacity to handle a minimum of 12 channels. Verify the monitor property detects conflicting indications, controller voltage drops, and the absence of reds as follows:

1. Conflicting indications shall cause the monitor to place the intersection in a flashing mode of operation. The monitor shall maintain the flashing mode until manually reset, regardless of 110 VAC power to the conflict monitor.
2. The +24 VDC cabinet power source shall be monitored by the conflict monitor. If that voltage drops to an unsatisfactory level, the monitor shall cause the controller to revert to flashing mode. Upon resumption of normal voltages, the controller shall resume normal stop and go operation without the necessity of manual resetting.
3. The absence of any required red signal voltage at the field connection terminals in the controller assembly shall cause the monitor to place the intersection in a flashing mode of operation. The monitor shall maintain the flashing mode until manually reset.
4. After power interruption (exceeding 457 +/- 25 milliseconds) to the controller assembly a flashing period (4 to 10 seconds adjustable) shall precede the start up (initialization) sequence. This feature can be resident in either the monitor or the controller.
5. The flash circuit shall be wired in a failsafe manner so that the intersection will revert to and remain in flashing mode whenever and for as long as either the controller mechanism or the monitor is disconnected.
6. Indicator lights shall be: a) an indicator for each channel shall be provided with latch status of failure, b) +24V light inputs, c) conflict light, d) conflict monitor power light and program board ajar light, e) power interrupt after failure light, f) red failure light.
7. G or W vs. Y signals on the same channel: This function shall be enabled on a per unit basis. When enabled, the conflict monitor shall be capable of monitoring for green or walk versus yellow indications active on one channel. It shall be recognized as a failure if the condition exits for 850 +/- 150 milliseconds. This failure shall always be considered a latched failure when enabled.
8. G, W, or Y vs. R signals on the same channel: This function shall be enabled on a per channel basis. When enabled, the conflict monitor shall be capable of monitoring for green or walk or yellow versus red indications active on one channel. It shall be recognized as a failure if the condition exists for 850 ±150 milliseconds. This failure shall always be considered a latched failure when enabled.

D Terminal Facilities

(1) Terminal facilities shall consist of all devices external to the controller unit that are necessary to complete the intersection control. Terminal facilities supplied shall be protected by dual 30-amp circuit breakers. The dual 30-amp breakers shall feed an evenly split signal bus supplied through bus relays and radio interference line filters. Bus relays, in all cases, shall be mercury type contractors and shall not be jack mounted. Terminal facilities shall also include applicable load switch panels of sufficient capacity to accommodate 8 vehicle phases, 4 pedestrian phases, and 4 overlap phases and shall

include a minimum of 6 solid state 3 circuit load switches with visual indicators. Flash transfer relays and two double circuit flashers shall also be provided. The internal wiring in the load switch panels shall be insulated wiring of sufficient size or the individual outputs fused so that the wiring will not be damaged by shorted output light circuits. Printed circuits in the load switch panels will not be acceptable.

(2) Use terminal strips to terminate controller cable, signal head cables and vehicle and pedestrian detector cables. Terminate all controller inputs and outputs on an interface panel. All interface and output terminal connections shall be the screw down type.

(3) Fuse all interconnect terminal facilities to incoming lines.

E Cabinet Switches

(1) Locate the following switches inside the cabinet on a maintenance panel:
   a. Controller On/Off
   b. Cabinet Light
   c. Stop Time (Three Position)

POSITION	LABEL SWITCH	FUNCTION
Upper	Stop Time	Place stop time on the controller
Center	Run	Remove the stop time input to the controller
Lower	Normal	Connects the Monitor to the controller stop time input

(2) Provide switches for all vehicle phases and all even pedestrian phases.

(3) Locate the following switches behind the Police access door:
   a. Signal/Off
   b. Flash/Normal

(4) The above switches shall function as follows:

Signal		Off
Flash	Signals Flash	Signals Dark
Normal	Signals Normal	Signals Dark

(5) Manual Detector Operation. Provide three position switches external to the controller that will permit manual detector calls and manual detector disconnect for each phase independently. The switches shall be spring loaded and shall rest in the center (non-operative) position. The switches shall be appropriately labeled and shall operate as follows:

Upper Position:	Spring loaded:	Disconnect detector
Center Position:	Normal detector operation	
Lower Position:	Spring loaded:	Test call is placed to controller.

F Cabinet and Cabinet Equipment

(1) Furnish the controller completely housed in a door-in-door ground mounted (without anchor bolts) metal cabinet of minimum size 1115 mm wide, 685 mm deep, and 1495 mm high.

(2) Provide a cabinet of clean-cut design and appearance. The size of the cabinet shall be such as to provide ample space for housing the controller, and all of the associated electrical devices which are to be furnished with the controller, together with any other auxiliary devices herein specified.

(3) All cabinets shall have the following:

1. A 15-amp circuit breaker for auxiliary equipment.
2. A 2-pole 20-amp circuit breaker for street lighting, photo eye, and contactor.
3. A valve type surge protector, as manufactured by Joslyn, catalog #L9200-10; General Electric, catalog #9L15DCB002; or approved equal, shall be mounted internally within the traffic signal cabinet and shall be connected across the load terminals of the circuit breakers. A General Electric Varistor, catalog #V130PA20A, shall be installed at the load terminals of each circuit breaker from the hot line to the grounded current carrying neutral conductor.
4. Incandescent light socket.
5. Solid state jack mounted NEMA flasher(s) with visual indicators and completely wired base, rated for at least 10 amps per circuit at 74 degrees C.
6. Control switches, including controller power switch, stop time switch, cabinet light switch, and emergency flash switch.
7. All switches specified in Section C-8 and F.
8. Necessary fuses and circuit breakers.
9. All wiring harnesses including detector harnesses. Loop detector harness connector shall be MS-3106B018-lS fully wired terminals I and J which shall go to separate isolated terminals. One loop harness shall be provided for each of the phases (i.e. 01 - 08).
10. **Duplex power receptacle**. A 120 VAC 20 amp, NEMA 5-20R GFl convenience outlet shall be mounted in each cabinet for energizing equipment or tools. The outlet shall be fuse protected.
11. **Radio interference filter**. Each control cabinet shall be equipped with a single radio interference suppressor of sufficient ampere rating to handle the load requirements. The RIS shall be installed at the input power point. It shall minimize interference in both the broadcast and the aircraft frequencies, and shall provide a maximum attenuation of 50DB over a frequency range of from 200KHZ to 75MHZ, when used in connection with normal installations. The radio interference suppressor shall be hermetically sealed in a substantial metal case that shall be filled with a suitable insulating compound. The terminals shall be nickel-plated brass studs of sufficient external length to provide space to connect two No. 8 AWG wires and shall be so mounted that they cannot be turned in the case. Ungrounded terminals shall be properly insulated from each other, and shall maintain a surface leakage distance of not less than 6.35 mm between any exposed current conductor and any other metallic parts. The terminals shall have an insulation factor of 100-200 megohms dependent

upon external conditions. The RIS shall not be rated less than 35 amperes. The RIS shall be designed for operation on 115 VAC +/- 10%, 60HZ, single-phase circuits, and shall meet the standards of UL and Radio Manufacturer's Association.

12. **Cabinet grounding**. In all controller cabinets and auxiliary cabinets, the AC common, the logic ground, and the chassis ground shall be isolated from each other the same as detailed by NEMA Standard.
13. **Suppressors**. Each 120 VAC circuit that serves as inductive device, such as a pan motor or a mechanical relay, shall have a suppressor to protect the controller's solid state devices from excessive voltage surges. Such suppressors shall be in addition to the surge protector at the input power point.

(4) All conductors in the cabinet shall be number 22 AWG or larger, with a minimum of 19 strands, and conforming to military specifications, Mil-W-16878D, Type B or D, vinyl nylon jacket, 600 volt, 105 degree C. All cabinets shall be factory wired.

(5) The cabinet shall provide weather protection and forced ventilation, air filters and heaters, with adjustable thermostat switches, and comply with the environmental and operating standards outlined in NEMA Specification TSI-1-1976. The cabinet shall provide reasonable vandalism protection. Provide access doors that have latches and a Corbin lock, dust cap, and key change IR6380. The small door shall be provided with standard police locks. The heater supplied shall have adjustable thermostat setting which varies from 0 degrees to 40 degrees Celsius.

(6) **Forced Ventilation**. Ventilate the controller cabinet containing solid-state equipment by means of a 120 VAC, 60HZ, tube axiac compact type fan. The fans free delivery airflow shall be greater than 2.83 cubic meter per minute. The magnetic field of 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 7 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 32 to 49 degrees Celsius. The fan shall run until the cabinet temperature decrease to approximately 17 degrees C. below the turn on temperature setting. The fan shall be fused.

(7) Provide metal shelves to support the controller and external equipment. The controller shall be located on the top shelf and not less than 965 mm above the bottom of the cabinet. There shall be a minimum of 250 mm vertical height for detector units.

(8) Locate buss and flash transfer relays, flashers, load switches, circuit breakers, and interference filters on a standard panel consistent with the intersection plan. Design shall facilitate field inspection and maintenance accessibility without excessive disassembly or special tools.

(9) Prime all inside and outside surfaces of the cabinet inside and outside surfaces with phosphate treatment and primer. After priming, give all exterior surfaces a minimum of 2 coats of rust resistant silver grey enamel; interior surfaces shall be furnished with rust resistant high gloss white enamel.

(10) Neatly fold and cap any cables, wires or circuits that are not being used. These wires shall be neatly tied and stowed away in or on the terminal facilities.

(11) Terminal facilities arrangement shall be in a fashion so that trouble shooting of load bay or behind the load bay can be accomplished with simple tools. This means that the load bay will be hinged so that it can be dropped down for ease of maintenance. There will be sufficient slack in the load bay wiring to allow for dropping the load bay.

(12) Protect all control cables, i.e., detector harnesses, controller harnesses, harnesses which connect manual/vehicle detector switches, by a nylon jacket or provide equivalent protection to prevent any contact with cabinet metal shelves, doors and any other sharp corners.

(13) If any branch circuit wiring or control wiring does not conform to the wire specifications, the supplier will be considered as not meeting the specifications and proper corrective action will be exercised against the supplier.

(14) Provide a 4 input PED isolation circuit to isolate controller logic ground from the field wiring. Outputs from the PED isolator shall be connected to phases 2,4,6,8.

G Solid State Load Switches

(1) Salvage existing load switches. Confirm that the load switches meet the requirements of NEMA TSl-Part 5 for three circuit load switches.

(2) Each load switch shall contain three individually replaceable, molded case, solid state relay modules. Each relay module shall utilize optical isolation between the control and the load circuits. The module shall have the functions and terminal assignments as specified in NEMA TSl-Part 5.

(3) Each panel of load switches shall either be rack mounted or shall have a switch support bracket extending across the entire length of the switch panel.

(4) The load bay arrangement from left to right in the cabinet shall be as described below:
1. Vehicular Phasing shall be groups first - 0l, 02, 03, 04, 05, 06, 07, 08.
2. Pedestrian Phasing shall be followed second - 02, 04, 06, 08.
3. Any other special phasing shall be grouped last.

H Equipment List and Drawings

(1) Submit detailed shop drawings of the control cabinet, equipment layout drawings and wiring diagrams of all equipment installed in the controller cabinet to the department for approval. Two sets of cabinet wiring diagrams shall be contained in a heavy duty clear plastic envelope mounted on the inside of the front door.

(2) At the time of delivery, furnish one set of instruction manuals and an itemized price list for each type of equipment, their subassemblies, and their replacement parts. The instruction book shall include the following information: a) Table of Contents, b) operating procedure, c) step-by-step maintenance and troubleshooting information for the entire assembly, d) circuit wiring diagrams, e) pictorial diagrams of parts locations, f) parts numbers, and g) theory of operation. The instructional manuals shall include itemized parts lists. The itemized parts lists shall include the manufacturer's name and parts number for all components (such as IC', diodes, switches, relays, etc.) used in each piece of equipment. The list shall include cross references to parts numbers of other manufacturers who make the same replacement parts.

I Warranty

(1) The contractor shall certify that the equipment meets the required specification and shall supply a complete catalog description. The following documents shall also be provided.

1. A warranty statement that stipulates that equipment to be supplied shall be warranted for two years from the date of purchase.
2. Operations manuals.
3. Maintenance manuals.
4. Schematic diagrams.
5. Component and equipment locations within the cabinet.

(2) If a malfunction in the controller unit, or its auxiliary equipment occurs during the warranty period, the supplier shall, within 24 hours after notification (excluding Saturday and Sunday), furnish a like controller unit module, or auxiliary equipment, for use while the warranted unit is being repaired. The isolation of any malfunction during the warranty period shall be the responsibility of the supplier. After the supplier has repaired and returned the equipment, the department shall then return the spare component to the supplier.

J Preemption

J.1 General

(1) These specifications detail a preemptor program for use with 2 through 8-phase-actuated controller.

(2) The preemptor shall be capable of being adaptable to meet the various types of applications such as railroad, fire station, and bridge preempts.

(3) The preemptor shall be internal to the controller and shall not alter controller capability or interchangeability under normal operation. The preemptor shall be completely programmable by the user.

J.2 Preempt Program

(1) Preempt Registration. The preempt call input shall initialize preempt registration and start preempt sequence unless a priority call input is activated which would treat the current controller preemptions state as normal operation and reinitiate call registration.

(2) Preempt Delay. As soon as the preempt call is registered the preempt delay will begin timing unless preempt delay is set zero or preempt delay omit was active during preempt call registration. Delay shall be programmable from 0 to 255 seconds minimum.

(3) As soon as preempt delay is timed out, current running phases not next to be common in preempt sequence are cleared. If the running phases are green and must be cleared, special programmable values of minimum green, walk and pedestrian intervals will time normal times. Concurrently a special preempt clearance is generated. This clearance is designed for advance track signals and any overlaps that may be green and require yellow clearance.

(4) Entry Clearance Phase(s) Select. Two sequential phases or phase pairs shall be available to be run as programmable fixed time intervals as an entry sequence. Two entry options shall be available, each programmable. The entry sequence shall be capable of being omitted entirely.

(5) Dwell Sequence. After the entry sequence, the preemptor shall enter the dwell sequence. During the dwell sequence the controller shall cycle between selected phases on a pre-timed or actuated basis. Pedestrian phasing may be normal or omitted entirely. When the dwell sequence is entered, a preempt dwell output shall be generated. The preemptor shall remain in dwell for the length of the dwell extension timer which shall be capable of being held in reset by the preempt call input. Dwell extension shall be omittable by setting the timer to zero.

(6) Exit Sequence. After leaving dwell, the controller shall enter one or two programmed exit phases(s) or phase pairs sequences. The sequence will time programmed minimum green and place a vehicle call on all phases not omitted. After timing exit phase minimum green the controller shall time and sequence normally.

K Time Base Coordination

(1) These specifications detail a Time Base Coordinator program for use with 2 through 8-phase actuated controller.

(2) The units shall allow traffic control equipment to be coordinated without requiring the use of interconnection cables. The units shall coordinate traffic control equipment based on signals from a precise time base which will allow output control signals to be changed at the proper pre-programmed time to achieve the coordinated operation of an intersection with other intersections or the desired operation of an isolated intersection. The coordinators may also used a programmer for a master intersection controller which in turn is interconnected with secondary intersection controllers. The units shall also be

capable of providing a command for MUTCD flash, and shall allow a full year program to be initiated and carried out without the necessity of field adjustment for anticipated special events, etc.

(3) The time base coordinator shall be internal to the controller and shall not alter controller capability or interchangeability under normal operation. The time base coordinator shall be completely programmable by the user.

L Loop Detector Amplifiers

L.1 Materials and Construction Methods

(1) All loop detector amplifiers supplied shall be two channel shelf-mounted units with digital output timing, and sequential scanning. The amplifier shall operate in compliance with all the requirements specified herein, when connected to an inductance loop plus lead-in of from 0 to 1000 microhenries with a loop parameter as low as 5.0 at the amplifiers operating frequency.

(2) Each channel shall be self-tuning and shall be fully operational within one minute after power up. After a power interruption, the channel shall automatically return to normal operation. Two conventional single channel front panel mounted MS3102a18-lP connectors for each amplifier shall be provided.

(3) Each channel shall have a fail-safe design such that if the loop sensor circuit is broken, the channel shall output a continuous vehicle call.

(4) Couple the loop sensor to the channel input circuitry through isolation transformers. This arrangement shall provide continued operation of the channel even if the loop sensor in the street develops resistive leakage or becomes grounded.

(5) Provide lightning protection for each amplifier as an integral part of its own circuitry. The protection shall enable the detector to withstand the discharge of a 10 microfarad capacitor, charged to ±1000 volts. The discharge shall be applied directly across the detector loop input pins with no loop load present. The protection shall also enable the detector to withstand the discharge from a 10 microfarad capacitor, charged to l to 2000 volts. The discharge shall be applied directly across either the detector loop input pins or across either side of the loop input pins to earth ground. For this test, the detector chassis shall be grounded and the detector loop input pins shall have a 5.0 ohm dummy resistive load connected across them.

(6) The detector circuits shall be so designed that changes due to environmental drift and applied power shall not cause an actuation. The detectors shall be capable of compensating or tracking for an environmental change of up to but not exceeding 1 x 10 minus 3% charge in inductance per second. This requirement must be met within two hours after initial application of operating power.

(7) Each detector channel shall have a minimum of three sensitivity settings and these shall be front panel selectable. The most sensitive setting shall respond to an inductance change of 0.02%. The least sensitive setting may be chosen by the manufacturer such that accurate and repeatable occupancy measurements may be obtained. This setting must cause the detector channel to respond to a 0.14-0.4% charge in inductance.

(8) Each detector channel shall have a front panel mounted indicator to provide a visual indication of each vehicle detection. A detector channel shall not cross talk with any other channel within the same module.

(9) The unit shall operate over input voltage from 95VAC to 135VAC and shall neither originate nor be sensitive to electrical transients in excess of proposed NEMA standards. Provide varistors between power lines to limit transient voltages.

(10) Provide extension and delay timing for each channel independently as described below:

L.2 Delay Timing

(1) Delay detector output for selected interval of l to 30 seconds in 1-second increments. Each new detection restarts the delay timer.

L.3 Extension Timing

(1) Extends vehicle calls up to 7.75 seconds in 0.50 second increments.

L.4 Green Gating

(1) Green signals from the controller shall be wired to the detector to modify timing functions. When green is true, delay timing is disabled. When green is false, extension timing is disabled. The green input signals may be DC or direct line voltage AC.

L.5 Smart Indicators

(1) Normal indicator operation is provided when neither timer is active. Delay and extensions are distinguished by 4 hertz and 16 hertz flashing respectively.

(2) Provide the necessary Loop Detector Amplifiers as required on the plan.

M Controller Operation

(1) Consistent with customary trade practices, the manufacturer shall furnish a warranty for all electrical or mechanical equipment described herein. The contractor shall turn such warranty over to the owner for potential dealing with the guarantor.

(2) If the contractor is the guarantor, he specifically waives the requirements of Section 289.14(2), Wisconsin Statutes, and agrees as a condition of the contract that the owner may maintain an action against him at anytime during the warranty period for recovery of damages which the state may have sustained by reason of the failure of the contractor to comply with the provisions of the warranty provided to the owner.

(3) During the installation and testing of the controller, the contractor shall provide, at his own expense, a competent representative to oversee, direct and manage the installation and testing of the controller. In the final stages of the installation and testing, the manufacturer's representative shall be available at the job site for consultation until such time as the controller operation is tested and accepted.

(4) If a malfunction in the controller unit or its auxiliary equipment occurs during the warranty period, the supplier shall, within 24 hours after notification (excluding Saturday and Sunday), furnish a like controller unit, module, or auxiliary equipment, for use while the warranted unit is being repaired. The isolation of any malfunction and the repair and/or replacement of any device within the warranty period shall be the responsibility of the supplier. After the supplier has repaired and returned the equipment, the county shall return the spare component to the supplier.

N Measurement

(1) The department will measure Traffic Signal Cabinet and Salvaged Controller, Main Street and Milwaukee Street as a single complete lump sum unit of work, acceptably completed in accordance to the contract.

O Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.05	Traffic Signal Cabinet and Salvaged Controller, Main Street and Milwaukee Street	LS

(2) Payment is full compensation for furnishing and installing the traffic signal cabinet, salvaging and reinstalling the signal controller and conflict monitor together with cabinet, switches for flashing operation, and supplying all other electrical components and fittings as are necessary to assure that the controller will perform the said functions.

70. Locate and Reference Property Corners, Item SPV.0105.06.

A Description

This special provision describes locating and referencing existing property corners within the project limits. Locate and provide adequate reference ties for existing property corners, which may be disturbed during construction such that the landmark may be re-established upon completion of construction.

B (Vacant)

C Construction

Obtain approval of the methods of survey with the engineer prior to beginning the work. Use a degree of accuracy in the survey work that is consistent with third order, Class II.

Maintain neat, orderly and complete survey notes and computations used in establishing landmark reference. Make the survey notes and computations available to the engineer within 24 hours request as work progresses.

D Measurement
The department will measure Locate and Reference Property Corners as a lump sum unit of work, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.06	Locate and Reference Property Corners	LS

Payment is full compensation for furnishing all survey work necessary to locate and reference the landmark.

71. Reset Property Corners, Item SPV.0105.07.

A Description
This special provision describes setting 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
Provide replacement property monuments that are 1-inch inside diameter by 24-inch long iron pipe or ¾-inch diameter iron rod or rebar that are 24-inches long in locations outside of pavement areas, a Bernsten Steel Nail Marker for placement in asphalt pavement, or a Bersten BP1 Brass Marker with anchoring plug for placement in concrete pavement.

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, 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 the monument.

D Measurement
The department will measure Reset Property Corners in place by each individual unit, in which a unit is one property corner, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.07	Reset Property Corners	Each

Payment is full compensation for furnishing all survey work necessary to reset property corners; and for furnishing, placing, and adjusting property corners.

72. Sanitary Sewer Repair, Item SPV.0105.08.

A Description

The existing 10" cast iron water main conflicts (intrudes) with the top of an existing 15" vitrified clay sanitary sewer at the east side of East Milwaukee Street and South Main Street. Remove this conflict by installing a new 12" ductile iron vertical offset and replacing approximately 40 feet of existing sewer with new 8" pipe. The approximate depth is 10 – 12 feet. Coordinate this work schedule with the engineer to minimize the number and timing of the water main service interruptions. Contact Steve Sage at (608) 755-3166 for information on the sanitary sewer televising report which is available for viewing at the City of Janesville Municipal Building, 18 N. Jackson Street, Janesville, WI.

B Materials

Use SDR 35 PVC pipe material, conforming to ASTM D 3034. In connecting to existing sewer, as identified on the TV reports included in contract documents, verify existing pipe material with the engineer prior to making connection. Engineer must approve connecting two different pipe materials using approved watertight adaptors (Fernco or approved equal), and shall conform to Section 8.3.2 of the City Standard Specifications.

All pipe materials shall be bedded using Class B bedding and covered with Class II material, per ASTM D-2321. This applies only to dry trench conditions.

PVC pipe joints shall conform to ASTM D-3212 (elastomeric joints with gasket material complying with ASTM F-477).

C Construction

C.1 General Construction Methods/Sewer Repair Procedures

The contractor is responsible to manage sewage during the time period of sanitary sewer repair with such management complying with state and local governmental regulations.

Any bypass pumping must be approved by the engineer and must incorporate proper traffic control for pumps, generators, pipe, etc., and this shall be incidental to work being performed.

Excavate the repair according area limits approved by the engineer, and remove existing pavement materials.

Watertight pipe connections to existing sanitary sewer and manhole shall comply with Section 3.2.27 and 3.5.7 (c) of the State Specifications. The new pipe connections shall be properly bedded with a 1" washed stone and compacted in-place. The engineer must approve the repair limits in the field prior to completing repair and backfilling.

C.2 Televised Inspection
Perform a televised inspection of the sanitary sewer repair. This inspection shall be conducted at the end of all contract work and final contract payment. Perform this inspection as specified in Section 5.3. A DVD and report record shall be submitted to the engineer.

Repair all defective work identified from televised inspection and requested by the engineer. This work shall be at contractor cost, and incidental to contract.

D Measurement
The department will measure Sanitary Sewer Repair by the lump sum unit of work, acceptably completed. The city will perform all measurement work.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.08	Sanitary Sewer Repair	LS

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work, and for which a separate bid item is not provided. Payment for the televised inspection work shall be incidental to the repair work, and shall include all work, and DVD/report submittal specified at repair location.

Payment includes excavation of the trench and disposal of unsuitable material; protecting or replacing existing utilities damaged during work, sewage management, placement and compaction of bedding; supplying and placing the pipe and fittings; reconnection to existing pipe, cover and backfill materials with compaction; and miscellaneous items associated with the sewer repair installation. Any additional repair work required, beyond the original scope outlined (and not approved by the engineer) on contract documents, and due to contractor's construction methods, shall be incidental to repair location.

73. Emergency Vehicle Preemption System, Main Street and Milwaukee Street, Item SPV.0105.09.

A Description
This work shall consist of furnishing and installing an Emergency Vehicle Preemption (EVP) System at a single intersection, as shown on the plans and as hereinafter provided.

B Materials
The EVP System shall include Opticom discriminator Model 454, Model 711 detectors, Model 138 detector cable, Type 1 LED confirmation lights, and appropriate wiring for power and signal to create a complete and functional system in accordance to the plans. This equipment shall be furnished and installed by the contractor. Provide a card rack as necessary to mount the discriminator in the signal cabinet.

C Construction
Detectors shall be mounted to the poles and arms as shown in the plans.

The traffic signal arms and poles shall be drilled and tapped to accommodate the mounting of the detector units as shown in the Plans. The installation method shall be approved by the engineer.

In the event, at installation, a noticeable obstruction is present in line with the detector, the contractor shall be obligated to advise the engineer before installation.

Unless otherwise directed by the engineer, the detector shield tube shall be installed with the drain hole at the bottom.

There shall be NO detector cable splices from the detector assembly to the controller terminations.

The EVP detector cables shall be routed to the controller and terminated by the contractor. Each lead shall be appropriately marked as to which street or avenue it is associated.

The EVP as specified and shown in the Plans shall be complete in place, tested, and in full operation.

D Measurement
The department will measure Emergency Vehicle Preemption System (Location) as a lump sum unit of work, acceptably completed in place per intersection.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.09	Emergency Vehicle Preemption System, Main Street and Milwaukee Street	LS

Payment is full compensation for furnishing and installing all equipment, cabling, necessary additional items, testing and setting up the system.

74. Concrete Sidewalk, 4-Inch, Colored, Item SPV.0165.01.

A Description
This special provision describes furnishing, installing and construction techniques used for colored concrete sidewalk terraces as shown on the plans and details.

References

American Society for Testing and Materials (ASTM)

- C979 – Standard Specification for Pigments for Integrally Colored Concrete
- C920 – Standard Specification for Elastomeric Joint Sealants
- D1752 – Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction
- D5249 – Standard Specification for Backer Material for Use with Cold- and Hot-Applied Joint Sealants in Portland-Cement Concrete and Asphalt Joints
- D7174 – Standard Specification for Preformed Closed-Cell Polyolefin Expansion Joint Fillers for Concrete Paving and Structural Construction

Required Submittals

Product Data:

Submit manufacturer's technical data for each manufacture product, including certification that each product complies with specified requirements.

Mock-Up:

Submit a 10-foot by 10-foot by 4-inch panel, to demonstrate finish, color, texture of colored concrete, jointing pattern and treatment required in actual construction at least 21 days prior to the installation for approval by the department and Landscape Architect. Location of sample on site shall be approved prior to construction. If product other than basis of design is used, contractor shall submit two mock-ups side by side showing finish, color, texture of colored concrete, jointing pattern and treatment expected in completed work. Consider the accepted mock-up as a minimum standard of workmanship to be matched or bettered throughout the Project. The mock-up maybe be constructed as part of the Project and, if approved, will be accepted as part of the work. Remove mock-ups which fail to meet department's and landscape architect's approval.

Quality Assurance

Installer Qualifications:

Engage an installer who has a minimum of five years' experience with projects of similar scope and quality to that of this project and who will assign installers from these earlier applications to this project, of which one will serve as lead installer. Three references are required.

B Materials

Products

Furnish concrete and reinforcing that is in accordance to the pertinent requirements of standard spec 501, Concrete and standard spec 602, Concrete Sidewalks. The concrete mix used for colored concrete sidewalk shall be the same as concrete mix used for sidewalks on the remainder of the project.

Base aggregate shall conform to standard spec 305.2.2.1, 1 ¼-inch.

C Construction

Installation

Installation shall meet the requirements of standard spec 501, Concrete and standard spec 602, Concrete Sidewalk. All horizontal concrete surfaces shall have the same finish as sidewalks on the remainder of the project. Vertical concrete surfaces shall have hand rubbed finish.

When excavating and forming for concrete sidewalk terraces, contractor shall minimize disturbance to base materials under adjacent existing planters, roadway curb and gutter or pavement. Contractor will be responsible for providing concrete to fill in as needed due to sloughage of based below the adjacent planters, roadway curb and gutter or pavement. Concrete used to fill in any sloughage should be vibrated in place to ensure complete infill. This may results in a small concrete ledge below the curb or pavement.

Install base aggregate in conformance with Section 305.

Coloring

Coloring shall be applied to concrete via a dry-shake color hardener per manufacturer's recommendations. Contractor shall maintain color matching throughout the entire project by using the same source, brand, type and color of cement, supplementary cementitious materials, aggregates and admixtures. Admixtures shall be used that are designed to be compatible with dry-shake color pigments.

Apply dry-shake color hardener to fresh concrete according to manufacturer's instructions.

Basis of Design

Butterfield Color® Perma-Cast® Shake-on Color Hardener
Color: P29 - Wheat
Coverage: 50 lbs. per 80 - 100 square feet, minimum. Check manufacturers recommendations based on ambient temperature, humidity, use of admixtures, finishing aids and finishing methods.

Delivery

Deliver products to site in manufacturer's original, unopened containers and packaging. Upon delivery, examine packages immediately to ensure all products are complete and undamaged.

Storage

Store products in a protected, dry area in manufacturer's unopened containers and packaging bearing label clearly identifying manufacturer's name and brand. Store materials under cover, clear of the ground and protected from the weather.

Handling

Protect product's finish from damage during handling and installation.

Joint Sealant
Colored concrete sidewalk paving joint sealant: Polyurethane, self-leveling; ASTM C920, Class 50, Uses T, I, M and A; single or multi-component
Applications: Joints in sidewalks

Expansion joint material shall be foam type confirming to ASTM D 1752, ASTM D 5249, Type 2, ASTM D 7174.

Jointing
Provide joints as shown on the drawings.

Unless otherwise approved, minimize construction joints by terminating placement at expansion joint locations indicated on drawings. Construction joint, commonly called control joints, in concrete slabs shall be tooled ¾".

When construction joints are necessary for flatwork, provide bonded joint keyway. Roughen the surface of the joint prior to second placement of concrete. Remove laitance, loosed aggregate and damaged concrete. Dampen concrete surface prior to second placement of concrete.

Unless otherwise approved, joints on flatwork shall be hand tooled – not sawn.

D Measurement
The department will measure Concrete Sidewalk, 4-Inch Colored 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.0165.01	Concrete Sidewalk, 4-Inch, Colored	SF

Payment is full compensation for providing and installing all materials necessary to completely install the colored concrete sidewalk; furnishing and installing concrete, applying dry-shake color hardener; reinforcing and any hardware; for performing all excavating, backfilling, proper disposing of surplus material and restoration.

75. Abandoned Vault Removal Masonry, Depth To 5', Item SPV.0165.02, Abandoned Vault Removal Masonry, Depth Over 5', Item SPV.0165.03, Abandoned Vault Removal Reinforced Concrete 0"-10", Depth To 5', Item SPV.0165.04, Abandoned Vault Removal Reinforced Concrete 0"-10", Depth Over 5', Item SPV.0165.05, Abandoned Vault Removal Reinforced Concrete 10"+, Depth To 5', Item SPV.0165.06, Abandoned Vault Removal Reinforced Concrete 10"+, Depth Over 5', Item SPV.0165.07.

A Description
This special provision describes Abandoned Vault Removal (Type) in accordance with the pertinent provisions of standard spec 203 and as hereinafter provided.

B Materials
Granular Backfill shall meet the requirements of standard spec 202.

C (Construction)
Remove the walls of the abandoned vault and backfill any area removed as required by the engineer. The limits of removal shall be verified by the Engineer. Any saw cuts or other necessary work in the removal is included in the bid item. Depth will be measured from the top of the top of existing sidewalk adjacent to building.

All material shall be removed from the right-of-way and disposed of by the contractor.

D Measurement
The department will measure Abandoned Vault Removal (Type) by the square foot of wall removed, 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.0165.02	Abandoned Vault Removal Masonry, Depth To 5’	SF
SPV.0165.03	Abandoned Vault Removal Masonry, Depth Over 5’	SF
SPV.0165.04	Abandoned Vault Removal Reinforced Concrete 0”-10”, Depth To 5’	SF
SPV.0165.05	Abandoned Vault Removal Reinforced Concrete 0”-10”, Depth Over 5’	SF
SPV.0165.06	Abandoned Vault Removal Reinforced Concrete 10”+, Depth To 5’	SF
SPV.0165.07	Abandoned Vault Removal Reinforced Concrete 10”+, Depth Over 5’	SF

Payment is full compensation for work as described above.

76. Shredded Hardwood Bark Mulch, Item SPV.0180.01.

A Description
This special provision describes furnishing and placing Shredded Hardwood Bark Mulch at the location shown on the plans and in accordance to the pertinent provisions of standard spec 632 and as hereinafter provided.

B Materials
Mulch shall consist of Shredded Hardwood Bark, free of material detrimental to healthy plant growth. Mulch shall be 1/8” nominal thickness, with at least 50 percent having an area of not less than 1 sq. inch, and no piece having an area of more than 2 sq. inches.

Mulch shall have NO color dyes.

C Construction
Install mulch in accordance to standard spec 632.3.9 to a depth of 3 inches.

All plants shall be completely mulched over the root system with a 3" layer of mulch material immediately after planting. Pull back mulch no less than 3" and no more than 6" from the 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.0180.01	Shredded Hardwood Bark Mulch	SY

Payment is full compensation for furnishing and installing all materials.

77. Gravel Mulch, Item SPV.0180.02.

A Description
This special provision describes furnishing and placing gravel mulch to restore existing gravel mulch areas disturbed by construction activities and as directed by the engineer.

B Materials
Furnish gravel that is washed coarse aggregate matching the existing mulch in the area being replaced in type, color, and size.

C Construction
Place approximately 3 inches thickness of mulch within the specified area after performing all necessary backfilling and adjustment. Blend new mulch into existing mulch to create a smooth transition.

D Measurement
The department will measure Gravel Mulch 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.0180.02	Gravel Mulch	SY

Payment is full compensation for furnishing all necessary materials, including the gravel mulch, fabric, excavation, hauling, disposal.

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

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.

   Eligibility and Duration: 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 __1__ *(number)* TrANS Graduate(s) be utilized on this contract.

2) **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).

Eligibility and Duration: To the employing contractor, for the length of time the TrANS graduate is in apprentice status.

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that __1__ *(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.

4) 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.

I. 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).

NOTE: *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.*

II. 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 PROGRAM

1. Description

General

a. The disadvantaged business enterprise (DBE) requirements of 49 CFR Part 26 apply to this contract. The department's DBE goal is shown on the cover of the bidding proposal. The contractor can meet the specified contract DBE goal by procuring services or materials from a DBE or by subcontracting work to a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.

b. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:

   i. Produce accurate and complete quotes.
   ii. Understand highway plans applicable to their work.
   iii. Understand specifications and contract requirements applicable to their work.
   iv. Understand contracting reporting requirements.

c. The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.

d. For information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:

   http://www.dot.wisconsin.gov/business/engrserv/dbe-main.htm

2. Definitions

a. Interpret these terms, used throughout this additional special provision, as follows:

   i. **Bid Percentage:** The DBE percentage indicated in the bidding proposal at the time of bid.
   ii. **DBE:** A disadvantaged business enterprise (DBE) certified as a DBE by the department and included on the department's list of certified DBE's who are determined to be ready, willing and able.
   iii. **DBE goal:** The amount of DBE participation expected in the contract as shown on the cover of the Highway Work Proposal.
   iv. **Discretionary Goal:** A contractor assigned DBE goal, typically abbreviated as “Disc” on the cover of the Highway Work Proposal, which is enforced as committed.
   v. **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.
   vi. **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.
   vii. **Voluntary Achievement:** The amount of DBE participation achieved and reported in the contract in excess of the assigned goal.

3. DBE Percentage Required at Bid Submission

Indicate the bid percentage (i.e. 0% through 100%) of DBE participation on the completed bidding proposal, including projects with discretionary goals. For electronic submittals, show the percentage in the miscellaneous data folder, Item 3, DBE Percent. For paper submittals, show the percentage on the sheet included after the schedule of items. By submission of the bid, the bidder contractually commits to DBE participation at or above the bid percentage, or certifies that they have utilized

comprehensive good faith efforts to solicit and utilize DBE firms to meet the DBE participation requirements of this contract proposal, and that the bid percentage is reflective of these good faith efforts. If the bidder does not indicate the bid percentage of DBE participation on the completed bidding proposal, the department will consider the bid irregular and may reject the bid.

4. Department's DBE Evaluation Process

a. Documentation Submittal

Within 10 business days after the notification of contract award, the contractor is to identify, by name, the DBE firms whose utilization is intended to satisfy this provision, the items of work of the DBE subcontract or supply agreement and the dollar value of those items of work by completing the Commitment to Subcontract to DBE Form [DT1506] and all necessary attachment A forms, as well as, Good Faith Waiver Form [DT1202] and supporting documentation as necessary. If the contractor fails to furnish the required forms within the specified time, the department may cancel the award. Delay in fulfilling this requirement is not a cause for extension of the contract time and shall not be used as a tool to delay execution.

i. Bidder Meets DBE Goal

If the bidder indicates that the contract DBE goal is met, after award and before execution, the department will evaluate the Commitment to Subcontract to DBE Form DT1506 and attachment A(s) to verify the actual DBE percentage achieved. If the DBE commitment is verified, the contract is eligible for execution with respect to the DBE commitment.

ii. Bidder Does Not Meet DBE Goal

(1) If the bidder indicates a bid percentage on the Commitment to Subcontract to DBE Form [DT1506] that does not meet the contract DBE goal, the bidder must submit a Good Faith Waiver Form [DT1202] and supporting documentation. After award and before execution, the department will evaluate the bidder's DBE commitment and consider the bidder's good faith waiver request.

(2) The department will review the bidder's good faith waiver request and notify the bidder of one of the following:

a. If the department grants a good faith waiver, the bid is eligible for contract execution with respect to DBE commitment.

b. If the department rejects the good faith waiver request, the department may declare the bid ineligible for execution. The department will provide a written explanation of why the good faith waiver request was rejected. The bidder may appeal the department's rejection as allowed under 7 a. & b.

5. Department's Criteria for Good Faith Effort

The Code of Federal Regulations {CFR}, 49 CFR Part 26-Appendix A, is the guiding regulation concerning good faith efforts. However, the federal regulations do not define “good faith” but states that bidder must actively and aggressively attempt to meet the goal. The federal regulations are general and do not include every factor or effort that can be considered. As a result, each state must establish its own processes and consider the factors established in its own process when making a determination of good faith.

a. The department will only grant a good faith waiver if the bidder has made the effort, given the relevant circumstances under the contract that a bidder actively and aggressively seeking to meet the goal would make. The department will evaluate the bidder's good faith effort to determine whether a good faith waiver will be granted. The bidder must demonstrate, on the DT1202 that they have aggressively solicited DBE participation in an attempt to meet the contract DBE goal and attaining the stated DBE goal is not feasible.

b. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. 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.

c. Prime Contractors should:
   i. Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOT-approved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.

   ii. Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a 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 A*. 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's to do work in a prime contractor's area of specialization.

      (1) Solicit quotes through all reasonable and available means from certified DBE firms who match 'possible items to subcontract' and send copies to DBESS office, highlighting areas in which you are seeking quotes. Email is acceptable.

      (2) SBN is the preferred outreach tool. https://www.bidx.com/wi/main. Other acceptable means include postal mail, email, fax, phone call.

         a. Primes must ask DBE firms for a response in their solicitations. See *Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.

         b. Solicit quotes at least 10 calendar days prior to the letting date {ideally two Fridays before the letting} to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking them if they need help in putting together a quote, or helping to arrange for equipment needs, or solve other problems.

      (3) Second solicitation should take place within 5 days
         a. An email solicitation is highly recommended for this second solicitation

      (4) 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.

      (5) When potential exists, advise interested DBE firms on how to obtain bonding, line of credit or insurance as may be requested.

      (6) 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. Copy of the DBE quotes
         e. Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.

d. Evaluate DBE quotes as documentation is critical if the prime does not utilize the DBE firm's quote for any reason.
   i. Evaluate DBE firm's capability to perform 'possible items to subcontract' using legitimate reasons, including but not limited to, ***a discussion with the DBE firm*** regarding its

capabilities prior to the bid letting. If lack of capacity is your reason for not utilizing the DBE quote, you are required to contact the DBE directly regarding their ability to perform the work indicated in the UCP directory as their work area [NAICS code]; only the work area and/or NAICS code listed in the UCP directory will be counted for DBE credit. Documentation of the conversation is required.

ii. In striving to meet a DBE conscious contract goal, prime contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.

iii. **Special Circumstance:** Evaluation of DBE quotes with tied bid items. "Tied quotes are the condition in which a subcontractor submits quotes including multiple areas of expertise across multiple work areas noting that the items and price are tied. Typically this type of quoting represents a cost saving to the prime but is not clearly stated as a discount; tied quotes are usually presented as 'all or none' quote to the prime." When non-DBE subcontractors submit tied bid items in their quotes to the prime, the DBE firms' quote may seem not competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples.

(1) Compare bid items common to both quotes, noting the reasonableness in the price comparison.

(2) 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.

e. After notification of contract award, submit **'Commitment to Subcontract'** form within the time period specified in the contract.

i. Provide the following information along with department form DT1202:

(1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact. A printed copy of SBN solicitation is acceptable.

(2) A description of information provided to the DBE's regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE.

(3) Photocopies or electronic copies of all written solicitations to DBE's.

(4) Documentation of each quote received from a DBE and, if rejected, the reason for that rejection.

(5) Bidder attendance at any pre-solicitation or pre-bid meetings the department held to inform DBE's of participation opportunities available on the project.

f. The department's DBE Support Services Office is available by phone, email or in writing to request assistance in meeting the DBE goal:

DBE Support Services Office
6150 Fond du Lac Ave.
Milwaukee, WI 53218
Phone: 414-438-4583 / 608-266-6961
Fax: 414-438-5392
E-mail: DOTDBESupportServices@dot.wi.gov

6. Bidder's Appeal Process

a. A bidder can appeal the department's decision to deny the bidder's good faith waiver request. The bidder must provide written documentation refuting the specific reasons for rejection as stated in the department's rejection notice. The bidder may meet in person with the department if so

requested. Failure to appeal within 7 calendar days after receiving the department's written notice of rejection of a good faith waiver request under constitutes a forfeiture of the bidder's right of appeal. If the bidder does not appeal, the department may declare the bid ineligible for execution.

b. The department will appoint a representative, who did not participate in the original determination, to assess the bidder's appeal. The department will issue a written decision within 7 calendar days after the bidder presents all written and oral testimony. In that written decision, the department will explain the basis for finding that the bidder did or did not meet the contract DBE goal or make an adequate good faith effort to meet the contract DBE goal. The department's decision is final. If the department finds that the bidder did not meet the contract DBE goal or did not make adequate efforts to meet the DBE goal, the department may declare the bid ineligible for execution.

7. Department's Criteria for DBE Participation

Department's DBE List

a. The department maintains a DBE list on the department's website at

http://app.mylcm.com/wisdot/Reports/WisDotUCPDirectory.aspx

b. The DBE office is also available to assist at 414-438-4583 or 608-266-6961.

8. Counting DBE Participation

Assessing DBE Work

a. 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 unified certification program agencies. If a firm becomes DBE certified before entering into a subcontract, the department may consider that DBE usage towards the contract goal. 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:

b. The department counts work performed by the DBE's own resources. The department includes the cost of materials and supplies the DBE obtains for the work. The department also includes the cost of equipment the DBE leases for the work. The department will not include the cost of materials, supplies, or equipment the DBE purchases or leases from the prime contractor or its affiliate, except the department will count non-project specific leases the DBE has in place before the work is advertised.

c. The department counts fees and commissions the DBE charges for providing a 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 engineer deems reasonable based on experience or prevailing market rates.

d. If a DBE subcontracts work, the department counts the value of the subcontracted work only if the DBE's subcontractor is also a DBE.

e. The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.

f. It is the prime contractor’s responsibility to determine the DBE's ability to perform the work with the use of the UCP directory.

9. Commercially Useful Function

a. The department counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.

b. A DBE is performing a commercially useful function if the following conditions are met:

c. For contract work, the DBE is responsible for executing a distinct portion of the contract work and it is carrying out its responsibilities by actually performing, managing, and supervising that work.

d. For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.

10. Trucking

All bidders are expected to adhere to the department's current trucking policy posted on the HCCI website at

http://www.dot.wisconsin.gov/business/engrserv/docs/dbe-trucking-notice.pdf

11. Manufacturers and Suppliers

The department counts material and supplies a DBE provides under the contract. The department will give full credit toward the DBE goal if the DBE is a manufacturer of those materials or supplies. The department will give 60 percent credit toward the DBE goal if the DBE is merely a supplier of those materials or supplies. It is the bidder's responsibility to find out if the DBE is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506.

12. DBE Prime

If the prime contractor is a DBE, the department will only count the work the contractor performs with its own forces, the work DBE subcontractors perform, and the work DBE suppliers or manufacturers perform.

13. Joint Venture

If a DBE performs as a participant in a joint venture, the department will only count that portion of the total dollar value of the contract equal to that portion of the work that the DBE performs with its own forces.

14. 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. On every other project that the mentor protégé team identifies itself on.

c. For no more than one half of the total contracted DBE goal on any WisDOT project.

15. DBE Replacement

In the event a Prime Contractor needs to replace a DBE firm originally listed on the approved DBE Commitment Form DT1506, the Prime Contractor must comply with the department's DBE Replacement Policy located on the DBE page on the following web site:
http://www.dot.wi.gov/business/dbe/docs/policyreplacingdbe.pdf

16. Changes to the approved DBE Commitment Form DT1506

If there are any changes to the approved Commitment to Subcontract to DBE Form DT1506, the prime contractor must submit a revised DBE Commitment Form DT1506 and relevant attachment A(s) to the DBE Programs Office within 5 business days.

17. Contract Modifications

When additional opportunity is available by contract modifications, the Prime Contractor shall utilize DBE Subcontractors, that were committed to equal work items, in the original contract.

18. Payment

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

APPENDIX A
Sample Contractor Solicitation Letter Page 1
This sample is provided as a guide not a requirement

GFW SAMPLE MEMORANDUM

TO: DBE FIRMS

FROM: POTENTIAL PRIME CONTRACTOR OR MAJOR SUBCONTRACTOR

SUBJECT: REQUEST FOR DBE QUOTES

LET DATE & TIME

DATE: MONTH DAY YEAR

CC: DBE OFFICE ENGINEER

Our company is considering bidding on the projects indicated on the next page, as a prime and/or a subcontractor for the Wisconsin Department of Transportation Month- date -year Letting. Page 2 lists the projects and work items that we may subcontract for this letting. We are interested in obtaining subcontractor quotes for these projects and work categories. Also note that we are willing to accept quotes in areas we may be planning to perform ourselves as required by federal rules.

Please review page 2, respond whether you plan to quote, highlight the projects and work items you are interested in performing and return it via fax or email within 3 days. Plans, specifications and addenda are available through WisDOT at the DBE Support Services office or at the Highway Construction Contract Information (HCCI) site at http://roadwaystandards.dot.wi.gov/hcci/

Your quote should include all of the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Page 2, with the indicated projects and items you plan to quote, should be used as a cover sheet for your quote.

Please make every effort to have your quotes into our office by time deadline the prior to the letting date. ***Make sure the correct letting date, project ID and proposal number, unit price and extension are included in your quote.*** We prefer quotes be sent via SBN but prime's alternative's are acceptable. Our office hours are include hours and days. Please call our office as soon as possible prior to the letting if you need information/clarification to prepare your quote at contact number.

If you wish to discuss or evaluate your quote in more detail, contact us after the contract is awarded. Status of the contract can be checked at WisDOT's HCCI site at http://roadwaystandards.dot.wi.gov/hcci/

All questions should be directed to:

Project Manager, John Doe,
Phone: (000) 123-4567
Email: Joe@joetheplumber.com
Fax: (000) 123- 4657

Sample Contractor Solicitation Letter Page 2

This sample is provided as a guide not a requirement

REQUEST FOR QUOTATION

Prime's Name: _____

Letting Date: _____

Project ID: _____

Please check all that apply

- ¨ Yes, we will be quoting on the projects and items listed below
- ¨ No, we are not interested in quoting on the letting or its items referenced below
- ¨ Please take our name off your monthly DBE contact list
- ¨ We have questions about quoting this letting. Please have some one contact me at this number

Prime Contractor 's Contact Person		DBE Contractor Contact Person	
Phone:		Phone	
Fax:		Fax	
Email:		Email	

Please circle the jobs and items you will be quoting below

Proposal No.	1	2	3	4	5	6	7
County							

WORK DESCRIPTION:

Clear and Grub	X		X	X		X	X
Dump Truck Hauling	X		X	X		X	X
Curb & Gutter/Sidewalk, Etc.	X		X	X		X	X
Erosion Control Items	X		X	X		X	X
Signs and Posts/Markers	X		X	X		X	X
Traffic Control		X	X	X		X	X
Electrical Work/Traffic Signals		X	X	X		X	
Pavement Marking		X	X	X	X	X	X
Sawing Pavement		X	X	X	X	X	X
QMP, Base	X	X		X	X	X	X
Pipe Underdrain	X			X			
Beam Guard				X	X	X	X
Concrete Staining							X
Trees/Shrubs	X						X

Again please make every effort to have your quotes into our office by time deadline prior to the letting date.

We prefer quotes be sent via SBN but prime's preferred alternative's are acceptable.

If there are further questions please direct them to the prime contractor's contact person at phone number.

APPENDIX B
BEST PRACTICES FOR PRIME CONTRACTOR & DBE SUBCONTRACTOR GOOD FAITH EFFORT

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 do as thorough a job as possible 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 HCCI 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 C
Types of Efforts considered in determining GFE
This list represents concepts being assessed; analysis requires additional steps

1. Whether the contractor attended any pre-solicitation or pre-bid meetings that were scheduled by WisDOT to inform DBEs of contracting and subcontracting opportunities;
2. Whether the contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited, in sufficient time to allow the DBEs to participate effectively;
3. Whether the contractor followed up initial solicitations of interest by contacting DBEs to determine if the DBEs were interested; returned the phone calls of interested DBE firms.
4. Whether the contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goal;
5. Whether the contractor provided interested DBEs with adequate information about the plans, specifications and requirements of the contract;
6. Whether the contractor negotiated in good faith with interested DBEs, not rejected DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities;
7. Whether the contractor made efforts to assist interested DBEs in being more competitive.
8. Whether the contractor effectively used the services of available minority community organizations: minority contractors groups, local, state, and Federal minority business assistance offices, and other organizations that provide assistance to small businesses and DBE firms.
9. Whether Prime used CRCS to identify DBE who specialize in relevant work areas.
10. Whether the contractor used available resources including contacting the DBE office, using WisDOT's website
11. Whether the contractor returned calls of firms expressing interest in a timely manner.

APPENDIX D
Good Faith Effort Evaluation Guidance
Excerpt from Appendix A of 49 CFR Part 26

APPENDIX A TO PART 26 -- GUIDANCE CONCERNING GOOD FAITH EFFORTS

I. When, as a recipient, you establish a contract goal on a DOT assisted contract, a bidder must, in order to be responsible and/or responsive, make 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, it is up to you 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. 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: meeting quantitative formulas is not required.

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. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must 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 to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.

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.

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. 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 employee status) are not legitimate causes for the rejection or non solicitation of bids in the contractor's efforts to meet the project goal.

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, you may take into account the performance of other bidders in meeting the contract. 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 reasonable 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.

Appendix E
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 completion at a later time.
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 is a part of the Bid Express® service that was created to ensure that small businesses have a centralized area to access information about upcoming projects. It can help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs.

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 an 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.
    b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588

ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

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

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

Payment to Lower-Tier Subcontractors

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

Release of Routine Retainage

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

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

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

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

ADDITIONAL SPECIAL PROVISION 6
ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

450.3.2.1 General

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

(1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 36 F for upper layers or 32 F for lower layers unless the engineer allows in writing. The contractor should place HMA pavement for projects on or north of STH 29 between May 1 and October 15 inclusive and for projects south of STH 29 between April 15 and November 1 inclusive. Notify the engineer at least one business day before paving.

(2) Unless the contract specifies otherwise, conform to the following:

- Keep the road open to all traffic during construction.
- Prepare the existing foundation for treatment as specified in 211.
- Incorporate loose roadbed aggregate as a part of preparing the foundation, in shoulder construction, or dispose of as the engineer approves.

(3) Place asphaltic mixture only on a prepared, firm, and compacted base, foundation layer, or existing pavement substantially surface-dry and free of loose and foreign material. Do not place over frozen subgrade or base, or where the roadbed is unstable.

450.5 Payment

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

(1) All costs of furnishing, maintaining, and operating the truck scale or other weighing equipment and furnishing the weigh tickets are incidental to the contract.

(2) Nonconforming material allowed to remain in place is subject to price adjustment under 105.3.2.

(3) Full-depth sawing to remove integrally placed safety edge where not required is incidental to the contract.

(4) The contractor is responsible for pavement performance. If because of an excusable compensable delay under 108.10.3, the engineer directs the contractor to pave when the temperature is less than 36 F for the upper layer or less than 32 F for lower layers, the department:

- Will relieve the contractor of responsibility for damage and defects the engineer attributes to cold weather paving.
- Will not assess disincentives for density or ride.

455.3.2.1 General

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

(1) Apply tack coat only when the air temperature is 32 F or more unless the engineer approves otherwise in writing. Before applying tack coat ensure that the surface is dry and reasonably free of loose dirt, dust, or other foreign matter. Do not apply if weather or surface conditions are unfavorable or before impending rains.

(2) Use tack material of the type and grade the contract specifies. The contractor may, with the engineer's approval, dilute tack material as allowed under 455.2.4. Provide calculations using the asphalt content as-received from the supplier and subsequent contractor dilutions to show that as-placed material has 50 percent or more residual asphalt content. Apply at 0.050 to 0.070 gallons per square yard, after dilution, unless the contract designates otherwise. The engineer may adjust the application rate based on surface conditions. Limit application each day to the area the contractor expects to pave during that day.

460.2.2.3 Aggregate Gradation Master Range

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

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

TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

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

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

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

460.3.4 Cold Weather Paving

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

460.3.4 Cold Weather Paving

460.3.4.1 Cold Weather Paving Plan

(1) Submit a written cold weather paving plan to the engineer at the preconstruction meeting. In that plan outline material, operational, and equipment changes for paving when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F. Include the following:

- Use a department-accepted HMA mix design that incorporates a warm mix additive from the department's approved products list. Do not use a foaming process.
- Use additional rollers.

(2) Engineer written acceptance is required for the cold weather paving plan. Engineer acceptance of the plan does not relieve the contractor of responsibility for pavement performance except as specified in 450.5(4).

460.3.4.2 Cold Weather Paving Operations

(1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F unless a valid engineer-accepted cold weather paving plan is in effect.

(2) If the national weather service forecast for the construction area predicts ambient air temperature less than 40 F at the projected time of paving within the next 24 hours, confirm or submit revisions to a previously engineer-accepted cold weather paving plan for engineer validation. Upon validation of the plan, the engineer will allow paving for the next day. Once in effect, pave conforming to the engineer-accepted cold weather paving plan for the balance of that work day or shift regardless of the temperature at the time of paving.

460.4 Measurement

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

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

460.5.1 General

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

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

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

460.5.2.2 Disincentive for HMA Pavement Density

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

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

460.5.2.4 Cold Weather Paving

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

460.5.2.4 Cold Weather Paving

(1) Payment for HMA Cold Weather Paving is full compensation for additional materials and equipment specified for cold weather paving under 460.3.4 including costs for preparing, administering, and following the contractor's cold weather paving plan.

(2) If HMA pavement is placed under 460.3.4 and the HMA Cold Weather Paving bid item is not in the contract, the department will pay for the additional costs specified in 460.5.2.4(1) as extra work. The department will pay separately for HMA pavement under the appropriate HMA Pavement bid items.

465.2 Materials

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

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

Bid Items Added

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

ITEM NUMBER	DESCRIPTION	UNIT
460.4000	HMA Cold Weather Paving	TON

Errata

Make the following corrections to the standard specifications:

501.3.2.4.4 Water Reducer

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

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

ADDITIONAL SPECIAL PROVISION 7

A. Reporting 1st Tier and DBE Payments During Construction

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

B. Costs for conforming to this special provision are incidental to the contract.

ADDITIONAL SPECIAL PROVISION 9
Electronic Certified Payroll Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) to submit certified payrolls electronically. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at: http://www.dot.wi.gov/business/civilrights/laborwages/index.htm

(2) Ensure that all tiers of subcontractors, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Tess Mulrooney at 608-267-4489 to schedule the training.

(4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator send several sample electronic files to Tess two months before a payroll needs to be submitted. Not every contractor's payroll system is capable of producing export files. For details, see pages 17-22 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at: http://www.dot.wi.gov/business/civilrights/laborwages/docs/crc-payroll-manual.pdf

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (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).

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.

Form FHWA-1273 must be included in all Federal-aid design-build 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). 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 bid proposal or request for proposal 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).

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.

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. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 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 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, 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 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, 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 230, 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 (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 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 35 and 29 CFR 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.

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, 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 who 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.

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, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure 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. 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, 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, 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 there under. 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, 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 and 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. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor 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 contracting agency deems appropriate.

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 non-minority 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 $10,000 or more.

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, 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). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

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

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, Employment Standards Administration, 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 Wage and Hour Administrator for determination. The Wage and Hour 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

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

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 at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor 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 §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, 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 Regulations, 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 section 1001 of title 18 and section 231 of title 31 of the United States Code.

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

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. 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.

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.

9. Disputes concerning labor standards. 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.

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

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.

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 of $10 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.

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 paragraph (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.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

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” 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:

(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.

2. 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. 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.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

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 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.

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 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).

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 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 1, 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

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

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.

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.

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.

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.

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 and 1200. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee 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 grantee or subgrantee 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.

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.

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. 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 Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

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. 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) 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;

(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; 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.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. **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)

a. By signing and submitting this proposal, the prospective lower tier 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.

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 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 grantee or subgrantee 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 grantee or subgrantee 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.

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.

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 Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

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.

* * * * *

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 is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall 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 20).

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.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

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.

SEPTEMBER 2002

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	%	County	%	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.

APRIL 2013

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.

DECEMBER 2013

BUY AMERICA PROVISION

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

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

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

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

Effective with September 2004 Letting

WISCONSIN DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

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

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

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

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

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

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

II. PAYROLL REQUIREMENTS

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

III. POSTINGS AT THE SITE OF THE WORK

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

a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 103.50 of the Wisconsin Statutes.

b. A copy of the State of Wisconsin Minimum Wages Rates. (Four pages.)

c. A copy of the contractor's Equal Employment Opportunity Policy.

d. On any project involving federal aid, in addition to the furnished postings, the contractor shall post a copy of the "Davis-Bacon Act, Minimum Wage Rates". (Three pages.)

IV. WAGE RATE REDISTRIBUTION

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

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

V. ADDITIONAL CLASSIFICATIONS

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

1. The affected employer(s) must make a written request to WisDOT Central Office to utilize the unlisted classification on this project.

2. The request must indicate the scope of the work to be performed by the unlisted classification and must indicate the proposed wage/fringe benefit package that the unlisted classification is to receive.

3. The work to be performed by the unlisted classification must not be performed by a classification that is included in the applicable prevailing wage rate determination.

4. The unlisted classification must be commonly employed in the area where the project is located.

5. The proposed wage/fringe benefit package must bear a reasonable relationship to those set forth in the applicable prevailing wage rate determination.

6. The request should be made prior to the actual performance of the work by the unlisted classification.

7. DWD must approve the use of the unlisted classification and the proposed wage/fringe benefit package. USDOL also must approve the use of the unlisted classification and the proposed wage/fringe benefit package on federal aid projects.

8. WisDOT and DWD may amend the proposed wage/fringe benefit package, as deemed necessary, and may set forth specific employment ratios and scope of work requirements in the approval document.

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

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

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

Compiled by the State of Wisconsin - Department of Workforce Development
for the Department of Transportation
Pursuant to s. 103.50, Stats.
Issued on May 1, 2014

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

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

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

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

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

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Bricklayer, Blocklayer or Stonemason	32.06	17.30	49.36
Carpenter	30.48	16.00	46.48
Cement Finisher	33.51	16.13	49.64
Future Increase(s): Add $1.87 on 6/1/14; Add $1.87 on 6/1/15; Add $1.75 on 6/1/16. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Electrician	43.47	8.66	52.13
Fence Erector	24.72	0.00	24.72
Ironworker	31.25	19.46	50.71
Line Constructor (Electrical)	38.42	12.68	51.10
Painter	21.87	11.37	33.24
Pavement Marking Operator	30.00	0.00	30.00
Piledriver	30.98	16.00	46.98
Roofer or Waterproofer	38.35	0.14	38.49
Teledata Technician or Installer	21.89	12.37	34.26
Tuckpointer, Caulker or Cleaner	35.25	13.18	48.43
Underwater Diver (Except on Great Lakes)	34.48	15.90	50.38
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	34.43	15.24	49.67
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	35.50	15.89	51.39
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.63	40.41
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.70	34.45

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
TRUCK DRIVERS			
Single Axle or Two Axle	34.22	19.90	54.12
Three or More Axle	24.52	17.77	42.29
Future Increase(s): Add $1.30/hr on 6/1/2014. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Articulated, Euclid, Dumptor, Off Road Material Hauler	29.27	20.40	49.67
Future Increase(s): Add $1.75/hr on 6/1/14); Add $1.25/hr on 6/1/15); Add $1.30/hr on 6/1/16); Add $1.25/hr on 6/ 1/ 17. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.			
Pavement Marking Vehicle	23.31	17.13	40.44
Shadow or Pilot Vehicle	34.22	19.90	54.12
Truck Mechanic	23.31	17.13	40.44
LABORERS			
General Laborer	29.04	14.63	43.67
Future Increase(s): Add $1.60/hr on 6/1/2014. Premium Pay: Add $.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add $.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add $.20/hr for blaster and powderman; Add $.25/hr for bottomman; Add $.35/hr for line and grade specialist; Add $.45/hr for pipelayer. DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	24.36	14.81	39.17
Landscaper	29.32	14.63	43.95
Future Increase(s): Add $1.60/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	23.50	15.10	38.60
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.31	12.67	30.98
Railroad Track Laborer	22.75	0.00	22.75
HEAVY EQUIPMENT OPERATORS			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100	36.72	20.40	57.12

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY $	HOURLY FRINGE BENEFITS $	TOTAL $
Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add $1.75/hr on 6/1/2014); Add $1.25/hr on 6/1/2015); Add $1.30/hr on 6/1/2016); Add $1.25/hr on 6/ 1/ 2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.			
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add $1.75/hr on 6/1/2014); Add $1.25/hr on 6/1/2015); Add $1.30/hr on 6/1/2016); Add $1.25/hr on 6/ 1/ 2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.	36.22	20.40	56.62
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, VIbratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane WIth a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A- Frames. Future Increase(s): Add $1.75/hr on 6/1/2014); Add $1.25/hr on 6/1/2015); Add $1.30/hr on 6/1/2016); Add $1.25/hr on 6/ 1/ 2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.	35.72	20.40	56.12

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or WIthout Attachments); Telehandler; Tining or Curing Machine.	35.46	20.40	55.86
Future Increase(s): Add $1.75/hr on 6/1/2014); Add $1.25/hr on 6/1/2015); Add $1.30/hr on 6/1/2016); Add $1.25/hr on 6/ 1/ 2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.			
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.	35.17	20.40	55.57
Future Increase(s): Add $1.75/hr on 6/1/2014); Add $1.25/hr on 6/1/2015); Add $1.30/hr on 6/1/2016); Add $1.25/hr on 6/ 1/ 2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http:/ / www.dot.wi.gov/ business/ civilrights/ laborwages/ pwc. htm.			
Fiber Optic Cable Equipment.	26.69	16.65	43.34

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI150010
DATE: January 2, 2015
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORERS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits
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, Utility Man); Batch Truck Dumper; or Cement Handler; Bituminous Worker; (Dumper, Ironer, Smoother, Tamper); Concrete Handler	$29.04	14.53
Group 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);	29.14	14.53
Group 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man	29.19	14.53
Group 4: Line and Grade Specialist	29.39	14.53
Group 5: Blaster and Powderman	29.24	14.53
Group 6: Flagperson; Traffic Control	25.67	14.53

CLASSES OF LABORER AND MECHANICS

Bricklayer	32.14	18.25
Carpenter	30.48	15.80
Millwright	32.11	15.80
Piledriverman	30.98	15.80
Ironworker (South of Edgerton and Milton)	34.34	25.72
Ironworker (Northern Area, Vicinity of Edgerton and Milton)	31.50	20.03
Cement Mason/Concrete Finisher	32.09	16.13
Electrician		See Page 3
Line Construction		
Lineman	40.81	32% + 5.00
Heavy Equipment Operator	38.77	32% + 5.00
Equipment Operator	32.65	32% + 5.00
Heavy Groundman Driver	26.78	14.11
Light Groundman Driver	24.86	13.45
Groundsman	22.45	32% + 5.00
Painter, Brush	24.50	16.27
Painter, Spray, Structural Steel,Bridges	25.50	16.27
Well Drilling:		
Well Driller	16.52	3.70

Truck Drivers:	Basic Hourly Rates	Fringe Benefits
1 & 2 Axles	25.18	18.31
Three or More Axles; Euclids, Dumptor & Articulated, Truck Mechanic	25.38	18.31

Notes: Welders receive rate prescribed for craft performing operation to which welding is incidental. 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 (29 CFR, 5.5(a)(1)(ii)). Includes Modification #0 dated January 2, 2015.

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI150010
DATE: January 2, 2015
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

POWER EQUIPMENT OPERATORS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits
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	$37.72	$20.93
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 jib lengths measuring 175 feet or less, and backhoes (excavators) having a manufacturer's rated capacity of 3 cu. yds. and over, caisson rigs, pile driver, dredge operator, dredge engineer.	$37.22	$20.93
Group 3: Mechanic or welder - heavy duty equipment, cranes with a lifting capacity of 25 tons or less, concrete breaker (manual or remote); vibrator/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pavement spreader - heavy duty (rubber tired); concrete spreader and distributor, automatic subgrader (concrete); concrete grinder and planing machine; concrete slipform curb and gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi and over); bridge paver; concrete conveyor system; concrete pump; stabilizing mixer (self propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter and grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer and scarifier; backhoes (excavators) having a manufacturers rated capacity of under 3 cu. yds.; 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 and A-frames; post driver; material hoist operator.	$36.72	$20.93
Group 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self-propelled; tractor (mounted or towed compactors and light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint saw (multiple blade) belting machine; burlap machine; texturing machine; tractor, endloader (rubber tired) - light; jeep digger; fork lift; mulcher; launch operator; fireman; environmental burner.	$36.46	$20.93
Group 5: Air compressor; power pack; vibratory hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; concrete pro-portioning 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 helper.	$36.17	$20.93
Group 6: Off – road material hauler with or without ejector	$30.27	$20.93

Premium Pay:
EPA Level "A" protection - $3.00 per hour
EPA Level "B" protection - $2.00 per hour
EPA Level "C" protection - $1.00 per hours

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI150010
DATE: January 2, 2015
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORERS CLASSIFICATION:	Rates	Benefits
Electricians		
Area 1	$29.00	26.5%+ 9.15
Area 2:		
Electricians	30.59	18.43
Area 3:		
Electrical contracts under $130,000	26.24	16.85
Electrical contracts over $130,000	29.41	16.97
Area 4:	28.50	28.75% + 9.27
Area 5	28.96	24.85% + 9.70
Area 6	35.25	19.30
Area 8		
Electricians	31.10	24.95% + 10.41
Area 9:		
Electricians	34.82	19.575
Area 10	29.64	20.54
Area 11	32.54	24.07
Area 12	32.87	19.23
Area 13	33.93	22.67
Teledata System Installer		
Area 14		
Installer/Technician	22.50	12.72
Sound & Communications		
Area 15		
Installer	16.47	14.84
Technician	25.63	17.21

Area 1 - 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 & Springfield), OUTAGAMIE, WAUPACA, WAUSHARA and WINNEBAGO COUNTIES.

Area 2 - ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Mayville, Colby, Unity, Sherman, Fremont, Lynn and 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

Area 3 - FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)

Area 4 - BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausauke and area south thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (except area North of Townships of Aniwa and Hutchins) COUNTIES.

Area 5 - ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausaukee), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Area North of the townships of Aniwa and Hutchins), VILAS AND WOOD COUNTIES

Area 6 - KENOSHA COUNTY

Area 8 - DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES

Area 9 - COLUMBIA, DANE, DODGE, (area west of Hwy. 26, except Chester & 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

Area 10 - CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

Area 11 - DOUGLAS COUNTY

Area 12 - RACINE (except Burlington township) COUNTY

Area 13 - MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES

Area 14 - Statewide.

Area 15 - DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES.

FEBRUARY 1999

NOTICE TO BIDDERS
WAGE RATE DECISION

The wage rate decision of the Secretary of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Secretary 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 omision 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. The higher of state or federal rate will apply.

SCHEDULE OF ITEMS REVISED:

CONTRACT: 20150310011

PROJECT(S): 5990-01-20, 5990-01-21

FEDERAL ID(S): WISC 2015121, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 Contract Items					
0010	201.0120 Clearing	365.000 ID		.		.
0020	201.0220 Grubbing	417.000 ID		.		.
0030	204.0100 Removing Pavement	3,587.000 SY		.		.
0040	204.0110 Removing Asphaltic Surface	192.000 SY		.		.
0050	204.0115 Removing Asphaltic Surface Butt Joints	87.000 SY		.		.
0060	204.0120 Removing Asphaltic Surface Milling	6,239.000 SY		.		.
0070	204.0130 Removing Curb	495.000 LF		.		.
0080	204.0150 Removing Curb & Gutter	3,275.000 LF		.		.
0090	204.0155 Removing Concrete Sidewalk	4,950.000 SY		.		.
0100	204.0195 Removing Concrete Bases	24.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0110	204.0210 Removing Manholes	2.000 EACH		.		.
0120	204.0220 Removing Inlets	6.000 EACH		.		.
0130	204.0245 Removing Storm Sewer (size) 01. 12-Inch Or Less	200.000 LF		.		.
0140	204.0245 Removing Storm Sewer (size) 02. 15 To 18-Inch	45.000 LF		.		.
0150	204.9060.S Removing (item description) 01. Luminaire And Mast Arm	12.000 EACH		.		.
0160	204.9060.S Removing (item description) 02. Overhead Sign Support	1.000 EACH		.		.
0170	204.9060.S Removing (item description) 03. Roadway Light Pole	12.000 EACH		.		.
0180	204.9060.S Removing (item description) 04. Wall Mounted Benches	9.000 EACH		.		.
0190	204.9060.S Removing (item description) 05. Median Planters	3.000 EACH		.		.
0200	204.9060.S Removing (item description) 06. Precast Parking Curb	7.000 EACH		.		.

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PROJECT(S): 5990-01-20, 5990-01-21
FEDERAL ID(S): WISC 2015121, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0210	204.9060.S Removing (item description) 07. Transit Stop Shelter	1.000 EACH		.		.
0220	204.9060.S Removing (item description) 08. Cigarette Urn	1.000 EACH		.		.
0230	204.9105.S Removing (item description) 01. Pedestrian Flasher	LUMP	LUMP			.
0240	205.0100 Excavation Common	1,816.000 CY		.		.
0250	213.0100 Finishing Roadway (project) 01. 5990-01-20	1.000 EACH		.		.
0260	305.0120 Base Aggregate Dense 1 1/4-Inch	1,055.000 TON		.		.
0270	340.0100 Cracking and Seating	3,205.000 SY		.		.
0280	390.0203 Base Patching Asphaltic	3,436.000 SY		.		.
0290	390.0303 Base Patching Concrete	3,503.000 SY		.		.
0300	415.1090 Concrete Pavement HES 9-Inch	55.000 SY		.		.
0310	416.0160 Concrete Driveway 6-Inch	57.000 SY		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0320	416.0260 Concrete Driveway HES 6-Inch	442.000 SY	.		.	
0330	416.0610 Drilled Tie Bars	16.000 EACH	.		.	
0340	416.0620 Drilled Dowel Bars	22.000 EACH	.		.	
0350	455.0120 Asphaltic Material PG64-28	79.000 TON	.		.	
0360	455.0605 Tack Coat	791.000 GAL	.		.	
0370	460.1101 HMA Pavement Type E-1	1,433.000 TON	.		.	
0380	460.2000 Incentive Density HMA Pavement	920.000 DOL	1.00000		920.00	
0390	465.0120 Asphaltic Surface Driveways and Field Entrances	46.000 TON	.		.	
0400	465.0125 Asphaltic Surface Temporary	134.000 TON	.		.	
0410	601.0407 Concrete Curb & Gutter 18-Inch Type D	325.000 LF	.		.	
0420	601.0417 Concrete Curb & Gutter 30-Inch Type K	25.000 LF	.		.	

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0430	601.0419 Concrete Curb & Gutter 30-Inch Type L	2,875.000 LF		.		.
0440	602.0405 Concrete Sidewalk 4-Inch	23,400.000 SF		.		.
0450	602.0415 Concrete Sidewalk 6-Inch	5,130.000 SF		.		.
0460	602.0515 Curb Ramp Detectable Warning Field Natural Patina	332.000 SF		.		.
0470	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	214.000 LF		.		.
0480	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	22.000 LF		.		.
0490	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	24.000 LF		.		.
0500	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	14.000 LF		.		.
0510	611.2004 Manholes 4-FT Diameter	2.000 EACH		.		.
0520	611.2006 Manholes 6-FT Diameter	1.000 EACH		.		.
0530	611.2007 Manholes 7-FT Diameter	1.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0540	611.3230 Inlets 2x3-FT	7.000 EACH		.		.
0550	611.8110 Adjusting Manhole Covers	21.000 EACH		.		.
0560	611.8115 Adjusting Inlet Covers	21.000 EACH		.		.
0570	611.8120.S Cover Plates Temporary	5.000 EACH		.		.
0580	612.0902.S Insulation Board Polystyrene (inch) 01. 2-Inch	92.440 SY		.		.
0590	616.0700.S Fence Safety	9,508.000 LF		.		.
0600	619.1000 Mobilization	1.000 EACH		.		.
0610	620.0300 Concrete Median Sloped Nose	100.000 SF		.		.
0620	623.0200 Dust Control Surface Treatment	11,000.000 SY		.		.
0630	624.0100 Water	25.000 MGAL		.		.
0640	625.0100 Topsoil	140.000 SY		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0650	627.0200 Mulching	115.000 SY		.		.
0660	628.1504 Silt Fence	200.000 LF		.		.
0670	628.1520 Silt Fence Maintenance	200.000 LF		.		.
0680	628.1905 Mobilizations Erosion Control	7.000 EACH		.		.
0690	628.1910 Mobilizations Emergency Erosion Control	7.000 EACH		.		.
0700	628.2006 Erosion Mat Urban Class I Type A	215.000 SY		.		.
0710	628.7020 Inlet Protection Type D	52.000 EACH		.		.
0720	628.7560 Tracking Pads	7.000 EACH		.		.
0730	629.0210 Fertilizer Type B	0.100 CWT		.		.
0740	630.0140 Seeding Mixture No. 40	2.900 LB		.		.
0750	631.1000 Sod Lawn	422.000 SY		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0760	632.0101 Trees (species) (size) (root) 01. Ginko, Princeton Sentry, B&B, 2 1/2" Cal.	8.000 EACH		.		.
0770	632.0101 Trees (species) (size) (root) 02. Hawthorn, Crusader, B&B, 2" Cal.	1.000 EACH		.		.
0780	632.0101 Trees (species) (size) (root) 03. Horsechestnut, Fruitless, B&B, 2 1/2" Cal.	2.000 EACH		.		.
0790	632.0101 Trees (species) (size) (root) 04. Kentucky Coffeetree, Espresso, B&B, 2" Cal.	1.000 EACH		.		.
0800	632.0101 Trees (species) (size) (root) 05. Lilac, Snowcap Japanese Tree, B&B, 2" Cal.	4.000 EACH		.		.
0810	632.0101 Trees (species) (size) (root) 06. Pear, Autumn Blaze, B&B, 2 1/2" Cal.	5.000 EACH		.		.
0820	632.0101 Trees (species) (size) (root) 07. Pear, Cleveland Select, B&B, 2 1/2" Cal.	8.000 EACH		.		.
0830	632.0101 Trees (species) (size) (root) 08. Oak, Regal Prince, B&B, 2" Cal.	9.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0840	632.0101 Trees (species) (size) (root) 09. Elm, New Harmony, B&B, 2" Cal.	1.000 EACH		.		.
0850	632.0201 Shrubs (species) (size) (root) 01. Coralberry, Hancock, Cg, #3	29.000 EACH		.		.
0860	632.0201 Shrubs (species) (size) (root) 02. Honeysuckle, Northern Bush, Cg, #3	25.000 EACH		.		.
0870	632.0201 Shrubs (species) (size) (root) 03. Rose, Henry Hudson, Cg #3	64.000 EACH		.		.
0880	632.0201 Shrubs (species) (size) (root) 04. Spirea, Magic Carpet, Cg #3	36.000 EACH		.		.
0890	632.0201 Shrubs (species) (size) (root) 05. Sumac, Gro-Low Fragrant, Cg #5	35.000 EACH		.		.
0900	632.9101 Landscape Planting Surveillance and Care Cycles	90.000 EACH		.		.
0910	634.0814 Posts Tubular Steel 2x2-Inch X 14-FT	35.000 EACH		.		.
0920	634.0816 Posts Tubular Steel 2x2-Inch X 16-FT	4.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0930	637.2210 Signs Type II Reflective H	262.500 SF		.		.
0940	637.2215 Signs Type II Reflective H Folding	50.000 SF		.		.
0950	637.2230 Signs Type II Reflective F	33.000 SF		.		.
0960	638.2102 Moving Signs Type II	3.000 EACH		.		.
0970	638.2602 Removing Signs Type II	75.000 EACH		.		.
0980	638.3000 Removing Small Sign Supports	28.000 EACH		.		.
0990	642.5001 Field Office Type B	1.000 EACH		.		.
1000	643.0100 Traffic Control (project) 01. 5990-01-20	1.000 EACH		.		.
1010	643.0300 Traffic Control Drums	15,776.000 DAY		.		.
1020	643.0420 Traffic Control Barricades Type III	3,264.000 DAY		.		.
1030	643.0705 Traffic Control Warning Lights Type A	10,880.000 DAY		.		.

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CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1040	643.0800 Traffic Control Arrow Boards	544.000 DAY		.		.
1050	643.0900 Traffic Control Signs	7,269.000 DAY		.		.
1060	643.1000 Traffic Control Signs Fixed Message	105.000 SF		.		.
1070	643.1050 Traffic Control Signs PCMS	544.000 DAY		.		.
1080	643.2000 Traffic Control Detour (project) 01. 5990-01-20	1.000 EACH		.		.
1090	643.3000 Traffic Control Detour Signs	8,108.000 DAY		.		.
1100	646.0106 Pavement Marking Epoxy 4-Inch	3,785.000 LF		.		.
1110	646.0126 Pavement Marking Epoxy 8-Inch	370.000 LF		.		.
1120	647.0156 Pavement Marking Arrows Epoxy Type 1	4.000 EACH		.		.
1130	647.0166 Pavement Marking Arrows Epoxy Type 2	4.000 EACH		.		.
1140	647.0356 Pavement Marking Words Epoxy	8.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1150	647.0556 Pavement Marking Stop Line Epoxy 12-Inch	265.000 LF		.		.
1160	647.0656 Pavement Marking Parking Stall Epoxy	1,095.000 LF		.		.
1170	647.0766 Pavement Marking Crosswalk Epoxy 6-Inch	1,340.000 LF		.		.
1180	647.0786 Pavement Marking Crosswalk Epoxy 18-Inch	150.000 LF		.		.
1190	650.4000 Construction Staking Storm Sewer	11.000 EACH		.		.
1200	650.5500 Construction Staking Curb Gutter and Curb & Gutter	3,720.000 LF		.		.
1210	650.8000 Construction Staking Resurfacing Reference	2,000.000 LF		.		.
1220	650.8500 Construction Staking Electrical Installations (project) 01. 5990-01-20	LUMP	LUMP			.
1230	650.9910 Construction Staking Supplemental Control (project) 01. 5990-01-20	LUMP	LUMP			.
1240	650.9920 Construction Staking Slope Stakes	290.000 LF		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1250	652.0210 Conduit Rigid Nonmetallic Schedule 40 1-Inch	408.000 LF		.		.
1260	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	3,619.000 LF		.		.
1270	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	271.000 LF		.		.
1280	652.0325 Conduit Rigid Nonmetallic Schedule 80 2-Inch	655.000 LF		.		.
1290	652.0615 Conduit Special 3-Inch	1,068.000 LF		.		.
1300	652.0700.S Install Conduit into Existing Item	5.000 EACH		.		.
1310	652.0800 Conduit Loop Detector	1,582.000 LF		.		.
1320	653.0130 Pull Boxes Steel 18x36-Inch	49.000 EACH		.		.
1330	653.0135 Pull Boxes Steel 24x36-Inch	7.000 EACH		.		.
1340	653.0140 Pull Boxes Steel 24x42-Inch	17.000 EACH		.		.
1350	653.0905 Removing Pull Boxes	53.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1360	654.0101 Concrete Bases Type 1	8.000 EACH		.		.
1370	654.0102 Concrete Bases Type 2	3.000 EACH		.		.
1380	654.0217 Concrete Control Cabinet Bases Type 9 Special	2.000 EACH		.		.
1390	655.0210 Cable Traffic Signal 3-14 AWG	384.000 LF		.		.
1400	655.0230 Cable Traffic Signal 5-14 AWG	488.000 LF		.		.
1410	655.0270 Cable Traffic Signal 15-14 AWG	2,266.000 LF		.		.
1420	655.0310 Cable Type UF 2-12 AWG	692.000 LF		.		.
1430	655.0515 Electrical Wire Traffic Signals 10 AWG	3,275.000 LF		.		.
1440	655.0610 Electrical Wire Lighting 12 AWG	702.000 LF		.		.
1450	655.0615 Electrical Wire Lighting 10 AWG	6,495.000 LF		.		.
1460	655.0620 Electrical Wire Lighting 8 AWG	4,845.000 LF		.		.

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CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1470	655.0625 Electrical Wire Lighting 6 AWG	1,521.000 LF		.		.
1480	655.0630 Electrical Wire Lighting 4 AWG	1,716.000 LF		.		.
1490	655.0645 Electrical Wire Lighting 1/0 AWG	12,888.000 LF		.		.
1500	655.0700 Loop Detector Lead In Cable	3,009.000 LF		.		.
1510	655.0800 Loop Detector Wire	4,576.000 LF		.		.
1520	657.0100 Pedestal Bases	8.000 EACH		.		.
1530	657.0255 Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	3.000 EACH		.		.
1540	657.0420 Traffic Signal Standards Aluminum 13-FT	6.000 EACH		.		.
1550	657.0430 Traffic Signal Standards Aluminum 10-FT	2.000 EACH		.		.
1560	658.0110 Traffic Signal Face 3-12 Inch Vertical	14.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1570	658.0215 Backplates Signal Face 3 Section 12-Inch	14.000 EACH		.		.
1580	658.0416 Pedestrian Signal Face 16-Inch	16.000 EACH		.		.
1590	658.0500 Pedestrian Push Buttons	16.000 EACH		.		.
1600	658.0600 Led Modules 12-Inch Red Ball	21.000 EACH		.		.
1610	658.0605 Led Modules 12-Inch Yellow Ball	21.000 EACH		.		.
1620	658.0610 Led Modules 12-Inch Green Ball	21.000 EACH		.		.
1630	658.0620 Led Modules 12-Inch Yellow Arrow	2.000 EACH		.		.
1640	658.0625 Led Modules 12-Inch Green Arrow	2.000 EACH		.		.
1650	658.0635 Led Modules Pedestrian Countdown Timer 16-Inch	16.000 EACH		.		.
1660	658.5069 Signal Mounting Hardware (location) 01. Main Street And Court Street	LUMP	LUMP			.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1670	658.5069 Signal Mounting Hardware (location) 02. Main Street And Milwaukee Street	LUMP	LUMP			.
1680	670.0100 Field System Integrator	LUMP	LUMP			.
1690	678.0500 Communication System Testing	LUMP	LUMP			.
1700	690.0150 Sawing Asphalt	2,245.000 LF		.		.
1710	690.0250 Sawing Concrete	4,930.000 LF		.		.
1720	715.0415 Incentive Strength Concrete Pavement	500.000 DOL	1.00000		500.00	
1730	999.1500.S Crack and Damage Survey	LUMP	LUMP			.
1740	ASP.1T0A On-the-Job Training Apprentice at $5.00/HR	500.000 HRS	5.00000		2500.00	
1750	ASP.1T0G On-the-Job Training Graduate at $5.00/HR	350.000 HRS	5.00000		1750.00	
1760	SPV.0035 Special 01. Granular Backfill Special	5,055.000 CY		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1770	SPV.0035 Special 02. Excavation Below Subgrade (Ebs)	100.000 CY		.		.
1780	SPV.0035 Special 03. Planting Soil Mix	593.000 CY		.		.
1790	SPV.0045 Special 01. Temporary Crosswalk Access	1,071.000 DAY		.		.
1800	SPV.0060 Special 01. Unknown Service Investigation	16.000 EACH		.		.
1810	SPV.0060 Special 02. Manhole Cover Type Special Logo	4.000 EACH		.		.
1820	SPV.0060 Special 03. Inlet Cover Type H Special Logo	7.000 EACH		.		.
1830	SPV.0060 Special 04. Utility Line Opening (Ulo)	25.000 EACH		.		.
1840	SPV.0060 Special 05. Concrete Base Type 3 Special	9.000 EACH		.		.
1850	SPV.0060 Special 06. Roadway Light Pole	9.000 EACH		.		.
1860	SPV.0060 Special 07. Decorative Luminaire	9.000 EACH		.		.
1870	SPV.0060 Special 08. Decorative Mast Arm	9.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1880	SPV.0060 Special 09. Existing Pedestrian Light Modifications	34.000 EACH		.		.
1890	SPV.0060 Special 10. Reconnect Existing Service	34.000 EACH		.		.
1900	SPV.0060 Special 11. Pedestrian Pole Bracket Arm	13.000 EACH		.		.
1910	SPV.0060 Special 12. Perennials, Aster, Purple Dome, Cg, #1	30.000 EACH		.		.
1920	SPV.0060 Special 13. Perennials, Chive, Summer Beauty, Cg, #1	171.000 EACH		.		.
1930	SPV.0060 Special 14. Perennials, Coneflower, Little Giant, Cg, #1	48.000 EACH		.		.
1940	SPV.0060 Special 15. Perennials, Daylily, Happy Returns, Cg, #1	74.000 EACH		.		.
1950	SPV.0060 Special 16. Perennials, Dropseed, Prairie, Cg, #1	64.000 EACH		.		.
1960	SPV.0060 Special 17. Perennials, Feather Reed Grass, Karl Foerster, Cg, #1	52.000 EACH		.		.
1970	SPV.0060 Special 18. Perennials, Lilyturf, Cg, #Sp04	180.000 EACH		.		.

CONTRACT: 20150310011
PROJECT(S): 5990-01-20, 5990-01-21
FEDERAL ID(S): WISC 2015121, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1980	SPV.0060 Special 19. Perennials, Milkweed, Butterfly, Cg, #1	33.000 EACH		.		.
1990	SPV.0060 Special 20. Perennials, Tufted Hairgrass, Gold Dew, Cg, #1	159.000 EACH		.		.
2000	SPV.0060 Special 21. Perennials, Switchgrass, Shenahdoah, Cg, #1	27.000 EACH		.		.
2010	SPV.0060 Special 22. Install City Supplied Street Name Sign	8.000 EACH		.		.
2020	SPV.0060 Special 23. Bulbs, Daffodil, Mixed	40.000 EACH		.		.
2030	SPV.0060 Special 24. Bicycle Rack	13.000 EACH		.		.
2040	SPV.0060 Special 25. Trash Receptacle	21.000 EACH		.		.
2050	SPV.0060 Special 26. Trash Receptacle (Salvage/Reinstall)	10.000 EACH		.		.
2060	SPV.0060 Special 27. Bench, 6-Foot, Backed	6.000 EACH		.		.
2070	SPV.0060 Special 28. Bench, 6-Foot, Backless	27.000 EACH		.		.

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PROJECT(S): 5990-01-20, 5990-01-21
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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2080	SPV.0060 Special 29. Bench, 6-Foot, Backed (Salvage/Reinstall)	6.000 EACH		.		.
2090	SPV.0060 Special 30. Abandon Existing Water Main	6.000 EACH		.		.
2100	SPV.0060 Special 31. Water Main Offset 6-Inch	2.000 EACH		.		.
2110	SPV.0060 Special 32. Water Main Offset 12-Inch	4.000 EACH		.		.
2120	SPV.0060 Special 33. New Hydrant	8.000 EACH		.		.
2130	SPV.0060 Special 34. Gate Valve With Manhole 4-Inch	2.000 EACH		.		.
2140	SPV.0060 Special 35. Gate Valve And Box 4-Inch	1.000 EACH		.		.
2150	SPV.0060 Special 36. Gate Valve With Manhole 6-Inch	8.000 EACH		.		.
2160	SPV.0060 Special 37. Gate Valve And Box 6-Inch	2.000 EACH		.		.
2170	SPV.0060 Special 38. Gate Valve With Manhole 8-Inch	1.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2180	SPV.0060 Special 39. Gate Valve With Manhole 12-Inch	5.000 EACH		.		.
2190	SPV.0060 Special 40. Water Service Replacement Short	10.000 EACH		.		.
2200	SPV.0060 Special 41. Water Service Replacement Long	15.000 EACH		.		.
2210	SPV.0090 Special 01. Planter Curb Special	495.000 LF		.		.
2220	SPV.0090 Special 02. Planter Curb Sacked Rubbed Surface Finish	1,225.000 LF		.		.
2230	SPV.0090 Special 03. Planter Wall Sacked Rubbed Surface Finish	180.000 LF		.		.
2240	SPV.0090 Special 04. Pavement Marking, Special, Preformed Thermoplastic	549.000 LF		.		.
2250	SPV.0090 Special 05. Ductile Iron Water Main 4 Or 6-Inch	573.000 LF		.		.
2260	SPV.0090 Special 06. Ductile Iron Water Main 8-Inch	30.000 LF		.		.
2270	SPV.0090 Special 07. Ductile Iron Water Main 12-Inch	2,240.000 LF		.		.

CONTRACT: 20150310011
PROJECT(S): 5990-01-20, 5990-01-21
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CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2280	SPV.0090 Special 08. Televising Sanitary & Storm Sewer	2,000.000 LF		.		.
2290	SPV.0105 Special 01. Rectangular Rapid Flashing Beacon (Rrfb) With Pedestrian Activation	LUMP	LUMP			.
2300	SPV.0105 Special 02. Remove, Salvage, And Reinstall Traffic Signal Equipment (Main & Court)	LUMP	LUMP			.
2310	SPV.0105 Special 03. Remove, Salvage, And Reinstall Traffic Signal Eqpmnt (Main & Milwaukee)	LUMP	LUMP			.
2320	SPV.0105 Special 04. Traffic Signal Cabinet And Salvaged Controller (Main & Court)	LUMP	LUMP			.
2330	SPV.0105 Special 05. Traffic Signal Cabinet And Salvaged Controller (Main & Milwaukee)	LUMP	LUMP			.
2340	SPV.0105 Special 06. Locate And Reference Property Corners	LUMP	LUMP			.
2350	SPV.0105 Special 07. Reset Property Corners	LUMP	LUMP			.
2360	SPV.0105 Special 08. Sanitary Sewer Repair	LUMP	LUMP			.

CONTRACT: 20150310011
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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2370	SPV.0105 Special 09. Emergency Vehicle Preemption System (Main & Milwaukee)	LUMP	LUMP			.
2380	SPV.0165 Special 01. Concrete Sidewalk, 4-Inch, Colored	12,070.000 SF		.		.
2390	SPV.0165 Special 02. Abandoned Vault Removal Masonry, Depth To 5'	125.000 SF		.		.
2400	SPV.0165 Special 03. Abandoned Vault Removal Masonry, Depth Over 5'	125.000 SF		.		.
2410	SPV.0165 Special 04. Abandoned Vault Removal Reinforced Concrete 0"-10", Depth To 5'	125.000 SF		.		.
2420	SPV.0165 Special 05. Abandoned Vault Removal Reinforced Concrete 0"-10", Depth Over 5'	75.000 SF		.		.
2430	SPV.0165 Special 06. Abandoned Vault Removal Reinforced Concrete 10"+, Depth To 5'	75.000 SF		.		.
2440	SPV.0165 Special 07. Abandoned Vault Removal Reinforced Concrete 10"+, Depth Over 5'	75.000 SF		.		.
2450	SPV.0180 Special 01. Shredded Hardwood Bark Mulch	1,159.000 SY		.		.

SCHEDULE OF ITEMS REVISED:

CONTRACT:	PROJECT(S):	FEDERAL ID(S):
20150310011	5990-01-20	WISC 2015121
	5990-01-21	N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2460	SPV.0180 Special 02. Gravel Mulch	200.000 SY	.			.
	SECTION 0001 TOTAL					.
	TOTAL BID					.

PLEASE ATTACH SCHEDULE OF ITEMS HERE