

HIGHWAY WORK PROPOSAL

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

Proposal Number:

18

<u>COUNTY</u>	<u>STATE PROJECT ID</u>	<u>FEDERAL PROJECT ID</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Milwaukee	2216-01-70	WISC 2016 169	West Mill Road N. 43 rd St - N. Sidney Pl	CTH S
Milwaukee	2216-02-70	WISC 2016 170	CTH G & CTH S Intersection of CTH G & CTH S	CTH S

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: May 10, 2016 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code
Contract Completion Time October 28, 2017	<div style="text-align: center;"> <h1>SAMPLE</h1> <h2>NOT FOR BIDDING PURPOSES</h2> </div>
Assigned Disadvantaged Business Enterprise Goal <div style="text-align: right;">20%</div>	
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 Grading, aggregate base, storm sewer, concrete curb and gutter, concrete pavement, hot mix asphalt, concrete sidewalk, traffic signal.	
Notice of Award Dated	Date Guaranty Returned

**PLEASE ATTACH
PROPOSAL GUARANTY HERE**

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2015 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

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

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

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 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://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx>

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, Room 601, 4802 Sheboygan Avenue, Madison, WI, during regular business hours.

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

B Submitting Electronic Bids

B.1 On the Internet

- (1) Do the following before submitting the bid:
 1. Have a properly executed annual bid bond on file with the department.
 2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.
- (2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:
 1. Download the latest schedule of items reflecting all addenda from the Bid ExpressTM web site.
 2. Use ExpediteTM software to enter a unit price for every item in the schedule of items.
 3. Submit the bid according to the requirements of ExpediteTM software and the Bid ExpressTM web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid.
 4. Submit the bid before the hour and date the Notice to Contractors designates.
 5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.
- (3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

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

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

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

- (2) Staple an 8 1/2 by 11 inch printout of the ExpediteTM 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 ExpediteTM 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 ExpediteTM generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.

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

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

DT1303 1/2006

Wisconsin Department of Transportation

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

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

DT1305 8/2003

Wisconsin Department of Transportation

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

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

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

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

(Signature of Authorized Contractor Representative)

(Date)

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.

[illegible]

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

Table of Contents

Article	Description	Page #
1.	General.....	3
2.	Scope of Work.	3
3.	Prosecution and Progress.	3
4.	Traffic.	9
5.	Temporary Street Access / Driveways.....	10
6.	Holiday Work Restrictions.	10
7.	Railroad Insurance and Coordination.	11
8.	Utilities.....	13
9.	Municipality Acceptance of Water Main Construction.	26
10.	Reference Construction Specifications.	27
11.	Erosion Control.....	27
12.	Dust Control Implementation Plan.	28
13.	City of Milwaukee Forestry.	30
14.	Clearing and Grubbing, Emerald Ash Borer.....	30
15.	Construction Trenches.	34
16.	Notice to Contractor – Contamination Beyond Construction Limits.	34
17.	Notice to Contractor – Excavation near Graceland Cemetery.....	34
18.	Public Convenience and Safety.	35
19.	Coordination with Businesses and Residents.	35
20.	Excavation Below Subgrade (EBS).....	35
21.	QMP Base Aggregate.	36
22.	Abandoning Sewer, Item 204.0291.S.	44
23.	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.	44
24.	QMP Base Aggregate Dense 1 1/4-Inch Compaction, Item 371.1000.S.....	48
25.	Concrete Pavement Fast Track, 8-Inch, Item 415.1150.S.01.	59
26.	Protection of Concrete.	61
27.	Concrete Pavement 8 Inch and 8 ½ Inch.	61
28.	HMA Pavement 4 MT 58-28 H, Item 460.6424.....	62
29.	Adjusting Manhole Covers.	66
30.	Traffic Control, General.....	66
31.	Signs Type II Reflective H, Item 637.2210.	66
32.	Removing Signs Type II, Item 638.2602.....	66
33.	Removing Small Sign Supports, Item 638.3000.....	67
34.	Temporary Pedestrian Surface Plywood, Item 644.1420.S.....	67
35.	Temporary Curb Ramp, Item 644.1601.S.....	68
36.	Temporary Pedestrian Safety Fence, Item 644.1616.S.....	69
37.	Backfill Slurry, Item SPV.0035.01.....	70
38.	Inlet Covers Type 57, Item SPV.0060.01.....	70
39.	Manhole Covers Type 58A, Item SPV.0060.02.....	71

40.	Internal Sanitary Manhole Seal, Item SPV.0060.03.....	71
41.	Adjusting Water Valve Boxes, Item SPV.0060.04.....	72
42.	Adjusting TES Manhole Cover, Item SPV.0060.05.....	73
43.	Cleaning Drainage Structures, Item SPV.0060.06.....	74
44.	Removing Landmark Reference Monument, Item SPV.0060.07.....	75
45.	Utility Line Opening (ULO), Item SPV.0060.08.....	76
46.	Removing Hydrant, Item SPV.0060.09; Installing Hydrant, Item SPV.0060.10.....	77
47.	Permanent Ditch Check, Item SPV.0060.11.....	79
48.	Electrical Vaults 17x30x18-Inch, Item SPV.0060.12.....	80
49.	Concrete Bases Type 10 Modified, Item SPV.0060.13.....	81
50.	Poles Type 9, Item SPV.0060.14; Type 10, Item SPV.0060.15.....	81
51.	Poles Type 12 Modified, Item SPV.0060.16.....	83
52.	Monotube Arms 25-FT, Item SPV.0060.17; 30-FT, Item SPV.0060.18; 35-FT Modified, Item SPV.0060.19.....	85
53.	Installing Conduit into Existing Manhole, Item SPV.0060.20.....	87
54.	4' Diameter Manhole Type TES, Item SPV.0060.21.....	88
55.	Connect Original Service (C.O.S.), Item SPV.0060.22; Disconnect Service (D.S.), Item SPV.0060.23.....	89
56.	Abandon Water Main 8-Inch, Item SPV.0060.24.....	91
57.	Water Main Protection, Item SPV.0060.25.....	92
58.	Pavement Marking Grooved Epoxy 4-Inch, Item SPV.0090.01; 8-Inch, Item SPV.0090.02.....	93
59.	Construction Staking, Concrete Sidewalk, Item SPV.0090.03.....	95
60.	5-Duct Conduit, Concrete Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.04; 4-Duct Conduit, Concrete Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.05; 2-Duct Conduit, Concrete Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.06; 1-Duct Conduit, Concrete Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.07.....	96
61.	Ductile Iron Water Main 8-Inch, Item SPV.0090.08; 12-Inch, Item SPV.0090.09; 16-Inch, Item SPV.0090.10.....	101
62.	Ductile Iron Hydrant Branch, 6-Inch, SPV.0090.11.....	103
63.	Emergency Vehicle Preemption System, Item SPV.0105.01 (ID 2216-01-70); Item SPV.0105.04 (ID 2216-02-70).....	105
64.	18-Inch Steel Casing Pipe Jacked and Bored, Item SPV.0105.02.....	106
65.	Concrete Pavement Joint Layout, Item SPV.0105.03.....	109
66.	Test Rolling, Item SPV.0170.01.....	109
67.	Geogrid Reinforcement, Item SPV.0180.01.....	110
68.	Management of Solid Waste, Item SPV.0195.01.....	112

SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 2216-01-70 W. Mill Rd. (CTH S), N. 43rd St. to N. Sidney Pl. located in the Cities of Milwaukee and Glendale, in Milwaukee County, Wisconsin and Project 2216-02-70 CTH G and CTH S, Intersection of CTH G and CTH S in the City of Milwaukee, Milwaukee 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, 2016 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 (20151210)

2. Scope of Work.

The work under this contract for Project 2216-01-70 consists of removing pavement, grading, aggregate base, concrete pavement, HMA pavement, concrete curb and gutter, storm sewer, sidewalk, traffic signals at N. Teutonia Ave., signing and pavement marking, landscaping and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

The work under this contract for Project 2216-02-70 consists of excavation, monotube bases, traffic signals at N. 43rd St., underground conduit, 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 time frame for construction of the project to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure that the time frame is consistent with the contract completion date. Upon approval, the engineer will issue the notice to proceed within 10 calendar days before the beginning of the approved time frame.

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

Complete Stage 1 construction operations on W. Mill Rd. (CTH S) prior to 12:01 AM Friday, October 28, 2016.

If the contractor fails to complete Stage 1 construction operations on W. Mill Rd. (CTH S) prior to 12:01 AM October 28, 2016 the department will assess the contractor \$500 in interim liquidated damages for each calendar day that Stage 1 construction operations on W. Mill Rd. (CTH S) remain incomplete after 12:01 AM, October 28, 2016. An entire calendar day will be charged for any period of time within a calendar day that the work remains incomplete 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.

Submit the Erosion Control Implementation Plan (ECIP) to the Engineer at least 14 calendar days prior to the preconstruction meeting. The plan shall include dewatering details.

Submit a Schedule of Operations to the engineer 14 days prior to the preconstruction conference.

The following is a general order of operations as shown in the traffic control plans:

2016:

- Route through traffic as shown on the detour route.
- Construct roadway from N. Teutonia Ave to Station 63+00.
- Construct roadway in the area of the Canadian National Railway crossing as railroad work is completed.

2017:

- Clear and Grub from Station 6+30 to 45+00 between January and March 2017.
- Temporary pave the westbound shoulder and construct a temporary crossover in area of Station 5+00 while the existing two-way traffic is maintained as shown on Stage 2A of the traffic control plans.
- Switch westbound traffic to the detour route shown in the plans and route eastbound traffic on the westbound lane(s) and temporary surface; close eastbound lane(s) to through traffic.
- Construct the new eastbound lanes as shown on Stage 2B and 2C of the traffic control plans.
- Route eastbound traffic to the new eastbound lane(s); close westbound lane(s) to through traffic.
- Construct the new westbound lanes as shown on Stage 3A and 3B of the traffic control plans.
- Route through traffic as shown on the detour route.
- Construct roadway in area of Union Pacific Railroad crossing as railroad work is completed and restore area of the temporary crossover.

Be advised that there may be multiple mobilizations for such items as traffic control items, signing items, pavement marking, landscaping items and other incidental items related to staging. No additional payment will be made by the department for mobilizations in Stage 1A, Stage 2B, 2C, Stage 3A, 3B or Stage 4.

During construction operations, at intersecting streets, ramp all saw joints, and all protruding manholes, inlets, catch basins and valves within the roadway area with hot mix asphalt material between the existing pavement surface and adjacent milled surface, as directed by the engineer. The cost of materials, labor and equipment necessary to install such ramps shall be included in the contract unit price for Asphaltic Surface Temporary. If necessary, placement of HMA pavement may continue past October 15, 2016 as directed by the engineer in the field.

Storm sewer pipes which cross the road will need a bulkhead in Stage 2B. The cost of the bulkhead is incidental to the unit bid price of the pertinent pipe. No additional payment of the bulkhead will be made. Remove the bulkhead in Stage 3A operations when the cross pipe is connected to the pipe laid in Stage 3A. The cost of removing the bulkhead and the connection is incidental to the unit price of the pertinent pipe. No additional payment for removing the bulkhead or connecting the pipes will be made.

The construction operations are divided into four main stages. W. Mill Rd (CTH S) may be closed to through traffic during Stage 1. Coordinate with the business owners to maintain access to their facilities during construction of Stage 1. W. Mill Rd. (CTH S) will remain open to at least one lane, desirably 12-foot wide, but no less than 11-foot wide of through traffic in the eastbound direction during construction in Stages 2 and 3. The intersections of N. 43rd St. (CTH G) and N. Teutonia Ave. (CTH D) shall remain open to traffic at all times. The construction operation staging is as follows:

Stage 1

Construct W. Mill Rd from N. Teutonia Ave to the Canadian National (CN) Crossing: Work includes the total reconstruction of the roadway as shown on the traffic control plans for Stage 1. The roadway may be closed to through traffic, but access to the businesses in this area must be maintained at all times. The temporary signal at N. Teutonia Ave will be installed by the City of Milwaukee prior to the start of Stage 1. Hold a meeting with the property owners to discuss access to their properties prior to the start of Stage 1. Stage 1 is described as follows:

The work in Stage 1 consists of removing the existing pavement, grading, base course, storm sewer construction, placing a new pavement surface, replacement, reconstruction and new construction of sidewalks, and landscaping to restore the site. Temporary crosswalks are required at the locations shown on the plans. The reconstruction of the Canadian National Railway crossing will be completed in Stage 1A in coordination with the work in Stage 1.

The department has contracted with others to cut all trees for this stage prior to construction. Remove any downed trees and grub the stumps and any remaining vegetation within the identified grubbing limits.

Stage 1A

Construct W. Mill Rd from the CN Crossing to N. Sidney Pl. Work includes the total reconstruction of the roadway as shown on the traffic control plans for Stage 1A. The roadway may be closed to through traffic, but access to the businesses west of this area must be maintained at all times. The temporary signal at N. Teutonia Ave will be installed by the City of Milwaukee prior to the start of Stage 1. Hold a meeting with the property owners to discuss access to their properties prior to the start of Stage 1A. Stage 1A is described as follows:

The work in Stage 1A consists of removing the existing pavement, grading, base course, storm sewer construction, placing a new pavement surface, constructing sidewalks, and landscaping to restore the site. The reconstruction of the CN crossing will be completed in Stage 1A in coordination with the work in Stage 1A. The surfacing work to be done by railroad forces is expected to take 3 working days and the signal work by railroad forces is expected to take 2 working days.

Work to be performed by the CN is removing the existing asphalt crossing material, installing new panels in the existing crossing area, installing new panels to match the proposed pavement, and installing new signals. By order of the Office of the Commissioner of Railroads, railroad work is to be complete by August 31, 2016. This work may take up to 10 working days.

Work by the contractor may take place east of the CN crossing after work by the CN is complete, or may take place before CN work is complete by coordinating work with the CN to ensure CN has access to the crossing.

The contractor may not clear and grub in the area of the CN crossing prior to September 30, 2016.

Prior approval from the WisDOT Regional Environmental Coordinator (REC) is required if the contractor wishes to remove trees prior to September 30, 2016. Additional tree removal beyond the area originally specified will require consultation with the United States Fish and Wildlife Service (USFWS) and may require a bat presence/absence survey. Notify the engineer if additional clearing cannot be avoided to begin coordination with the WisDOT REC. The WisDOT REC will initiate consultation with the USFWS and determine if a survey is necessary.

Stage 1/1A have a completion date of October 28, 2016. If contract time expires prior to completing all work specified in the contract for stage 1/1A, liquidated damages will be affixed according to standard spec 108.11 for each calendar day the work remains unfinished.

Winter 2016-2017

Clear all trees called out for removal in Stage 2 and Stage 3 between January 2, 2017 and March 31, 2017, as no clearing activities may occur from June 1, 2016 to September 30, 2016, and from April 1, 2017 to September 30, 2017. Grubbing operations are also permitted during this period. No other operations are allowed without written permission of the department.

Coordinate the resumption of project activities in 2017 with the construction team leader no later than March 1, 2017.

Stage 2A

Preparation for Temporary Traffic Control Stages 2 and 3: work includes construction of all the temporary surfaces, temporary driveways, temporary drainage and associated work necessary for maintaining temporary traffic control for Stages 2 and 3 of construction.

Work includes placing a temporary asphaltic surface on the unpaved/gravel shoulder areas on the westbound side of the project and constructing a temporary crossover near Station 5+00 as shown on the overview. Maintain the existing two-way traffic during Stage 2A. The City of Milwaukee will install temporary traffic signals at N. 43rd St at the end of Stage 2A, prior to the transition to Stage 2B.

Stage 2B

Construct eastbound lanes: Work includes total reconstruction of the eastbound lane(s), including portions of the left turn lanes and side streets along the project. Maintain one-way eastbound traffic on the westbound lane(s) and temporary asphaltic surface during Stage 2B. Eastbound traffic will be routed through the existing railroad crossings during Stage 2B. Westbound traffic will be detoured as shown on the detour plan. The construction will be gapped at the Union Pacific Railroad crossing during Stage 2B and completed in Stage 4.

The work in Stage 2B consists of removing the existing pavement, grading, base course, storm sewer construction, placing a new pavement surface, replacement, reconstruction and new construction of sidewalks, and landscaping to restore the site. ADA compliant temporary curb ramps, temporary pedestrian surface and temporary crosswalks are required at the locations shown on the plans. Appropriate staging for sidewalk construction is required according to the MUTCD and following the Temporary Traffic Control Stage above.

Stage 2C

Work includes the paving of gaps at the intersections of N. 43rd St and N. Teutonia Ave left in Stage 2B. The temporary traffic signals will be adjusted by the City of Milwaukee to match new traffic pattern at the end of Stage 2C.

Stage 3A

Construct westbound lanes: Work includes total reconstruction of the westbound lane(s), including remaining portions of the left turn lanes and side streets not constructed in Stage

2B. Maintain one-way eastbound traffic on the newly constructed eastbound lane(s) during Stage 3A. Eastbound traffic will be routed through the existing railroad crossings during Stage 3A. Westbound traffic will be detoured as shown on the detour plan. The construction will be gapped at the Union Pacific Railroad crossing during Stage 3A and completed in Stage 4. No disturbance of the existing ground north of the Graceland cemetery fence is allowed.

The work in Stage 3A consists of removing the existing pavement, grading, base course, storm sewer construction, placing a new pavement surface, replacement, reconstruction and new construction of sidewalks, and landscaping to restore the site. ADA compliant temporary ramps, temporary pedestrian surface and crosswalks are required at the locations shown on the plans. Appropriate staging for sidewalk construction is required according to the MUTCD and following the Temporary Traffic Control Stage above.

Stage 3B

Work includes the paving of gaps at the intersections of N. 43rd St and N. Teutonia Ave left in Stage 3A. The temporary traffic signals will be removed by the City of Milwaukee and the permanent traffic signals will be installed at the end of Stage 3B.

Stage 4

Construct W. Mill Rd at Union Pacific Railroad (UP) Crossing and approaches: Work consists of removing the existing pavement, grading, base course, storm sewer construction, placing a new pavement surface, constructing sidewalks, and landscaping to restore the site. The reconstruction of the UP crossing will be completed in Stage 4 in coordination with the work in Stage 4. The surfacing work to be done by railroad forces is expected to take 2 working days and the signal work by railroad forces is expected to take 2 working days.

Work to be performed by the Union Pacific Railroad would be removing the existing crossing material, installing new panels in the existing crossing area, installing new panels to match the proposed pavement, and installing new signals. By order of the Office of the Commissioner of Railroads, railroad work is to be complete by August 31, 2017. This work may take up to 10 working days.

Work by the contractor may take place east of the UP crossing after work by the UP is complete, or may take place before UP work is complete by coordinating work with the UP to ensure UP has access to the crossing.

The contractor may not clear and grub in the area of the UP crossing prior to September 30, 2017.

Prior approval from the WisDOT Regional Environmental Coordinator (REC) is required if the contractor wishes to remove trees prior to September 30, 2017. Additional tree removal beyond the area originally specified will require consultation with the United States Fish and Wildlife Service (USFWS) and may require a bat presence/absence survey. Notify the engineer if additional clearing cannot be avoided to begin coordination with the

WisDOT REC. The WisDOT REC will initiate consultation with the USFWS and determine if a survey is necessary.

Northern Long-eared Bat (*Myotis septentrionalis*)

Northern Long-eared Bats (NLEB) have the potential to inhabit the project limits because they roost in trees and structures (bridges, culverts, buildings). Roosts may not have been observed on this project, but conditions to support the species exist. The species and all active roosts are protected by the Federal Endangered Species Act.

In order to avoid adverse impacts upon the NLEBs, no vegetation clearing and grubbing within the identified clearing and grubbing limits will be allowed from April 1 to September 30 both dates inclusive.

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

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

4. Traffic.

Perform work under this item according to the requirements of standard spec 643, and as approved by the engineer, except as hereinafter modified.

Substantially accomplish the construction sequence, including the associated traffic control as detailed in the Traffic Control Plan, and as described herein.

Maintain one lane, desirably 12-foot wide, but no less than 11-foot wide of traffic in the eastbound direction at all times during construction. Establish lane closures, if required, only for the time period necessary to safely accommodate nearby work. Notify the engineer a minimum of 48 hours in advance of any desired lane closures.

City of Milwaukee Traffic Signals and Signs has facilities located within the limits of the project. Install all specified traffic signal equipment, poles, and cabling and traffic signs as part of the project. Prior to construction, pole and signal standard relocations and temporary traffic signal work will be completed by City of Milwaukee forces on West Mill Road at North 43rd Street and at North Teutonia Avenue.

Provide a 10-working day advance notice to Mr. Al Nichols of the City of Milwaukee's Traffic Signal Field Operations at (414) 286-3687 (office) or (414) 708-5148 (mobile) to coordinate the installation of traffic signal materials as well as any city traffic signal concerns.

Do not proceed with any construction operation until all traffic control devices for such work are in the proper location.

Maintain adequate turning provisions for vehicles, including trucks and buses, at all intersections during construction operations, as directed by the engineer.

Maintain pedestrian access to abutting properties and at intersections as directed by the engineer.

In the event access to properties is needed by emergency vehicles and equipment such as fire, police, and rescue services, cooperate to the fullest extent in accommodating emergency access in the shortest time. The traffic requirements are subject to changes at the direction of the engineer in the event of an emergency.

5. Temporary Street Access / Driveways.

It is the responsibility of the contractor to construct and maintain in a satisfactory condition temporary street access and temporary driveways at locations determined in the field by the engineer to provide vehicular and/or pedestrian access.

Maintain or provide where necessary vehicular and/or pedestrian access to adjacent businesses as directed by the engineer.

Maintain local access to residences within the project area to the maximum extent possible. Do not close or remove from service any residential or commercial approaches without giving 48-hour notice to the occupants of the premises to remove their vehicles prior to the removal or closing of the drive approach access. Maintain reasonable access to abutting business locations at all times.

The time between driveway removal and grading and replacement with temporary stone shall be no longer than 4 hours. The time between replacing the temporary driveway with the permanent restoration shall be no longer than 4 hours for a HMA driveway and seven days for a concrete driveway.

Construct the temporary street access and driveways with base aggregate dense 1 1/4-inch to the dimensions determined by the engineer.

6. Holiday Work Restrictions.

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

- From noon Friday, July 1, 2016 to 6:00 AM Tuesday, July 5, 2016 for Independence Day;
- From noon Friday, September 2, 2016 to 6:00 AM Tuesday, September 6, 2016 for Labor Day;
- From noon Wednesday, November 23, 2016 to 6:00 AM Monday, November 28, 2016 for Thanksgiving;
- From noon Wednesday, December 14, 2016 to 6:00 AM Monday, January 9, 2017 for Christmas and New Year's Day;
- From noon Friday, May 26, 2017 to 6:00 AM Tuesday, May 30, 2017 for Memorial Day;
- From noon Friday, June 30, 2017 to 6:00 AM Wednesday, July 5, 2017 for Independence Day;
- From noon, Friday, September 1, 2017 to 6:00 AM Tuesday, September 5, 2017 for Labor Day.

107-005 (20050502)

7. Railroad Insurance and Coordination.

A Description

Comply with standard spec 107.17 for all work affecting The Union Pacific Railroad Company and the Canadian National Railroad LTD property, respectively, and any existing tracks.

A.1 Railroad Insurance Requirements

In addition to standard spec 107.26, provide railroad protective liability insurance coverage as specified in standard spec 107.17.3. Insurance is filed in the name of The Union Pacific Railroad Company or the Canadian National Railroad LTD.

Union Pacific Railroad:

Notify evidence of the required coverage, and duration to John Venice, Manager Special Projects – Industry & Public Projects Engineering Department, 101 North Wacker Drive – Suite 1920, Chicago, IL 60606, TELEPHONE (312) 777-2043, FAX (402) 233-2769, email jnvenice@up.com.

Include the following information on the insurance document:

Project 2216-01-70
Route Name West Mill Road (CTH S) Milwaukee County
Crossing ID 178890G
Railroad Subdivision Granville Sub
Railroad Milepost MP92.60

Canadian National Railroad:

Notify evidence of the required coverage, and duration to Jackie Macewicz, Manager Public Works at 1625 Depot St., Stevens Point, WI, 54481; TELEPHONE (715) 345-2503. Include the following information on the insurance document:

Project 2216-01-70
Route Name Mill Road (CTH S) Milwaukee County
Crossing ID 386829B
Railroad Subdivision Saukville Sub
Railroad Milepost MP 95.19

A.2 Work by Railroad

The railroad will perform the work described in this section, except for work described in other special provisions and will be accomplished without cost to the contractor.

Work to be performed by the Union Pacific Railroad would be extending the existing concrete crossing panels to match the proposed pavement, bike accommodations and sidewalks on the north and south sides of W. Mill Rd. The Union Pacific Railroad shall install and maintain cantilevered 12" LED automatic flashing lights with gates, two electronic bells and other appurtenances.

Work to be performed by the Canadian National Railroad would be removing the existing asphalt crossing material, installing new panels in the existing crossing area, and installing new panels to match the proposed pavement, bike accommodations and sidewalks on the north and south sides of W. Mill Rd. The Canadian National Railroad shall install and maintain cantilevered 12" LED automatic flashing lights with gates, two electronic bells and other appurtenances.

A.3 Names and addresses of Railroad Representatives for Consultation and Coordination

Union Pacific Railroad:

Contact John Venice, Manager Special Projects – Industry & Public Projects Engineering Department, 101 North Wacker Drive – Suite 1920, Chicago, IL 60606, TELEPHONE (312) 777-2043, FAX (402) 233-2769, email jvenice@up.com, for consultation on railroad requirements during construction.

Canadian National Railroad:

Contact Jackie Macewicz, Manager Public Works, 1625 Depot St., Stevens Point, WI, 54481; TELEPHONE (715) 345-2503; FAX (715) 345-2534; email jackie.macewicz@cn.ca for consultation on railroad requirements during construction.

Contact Mary Ellen Carmody, Audit Officer, Administration Service Center, 24002 Vreeland Road, Flat Rock, MI 48134; TELEPHONE (734) 783-4533; No FAX number; email maryellen.carmody@cn.ca for flagging arrangements. Advise Ms. Carmody that the flagging services are to be billed at the rate for a public highway project.

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

A.4 Temporary Grade Crossing

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

A.5 Train Operation

Union Pacific:

No passenger trains and approximately three through freight trains operate weekly through the construction site. Through freight trains operate at up to 10 mph.

Canadian National:

No passenger trains and approximately two through freight trains operate daily through the construction site. Through freight trains operate at up to 10 mph.

B. Flagging:

No flagging is anticipated with this project. If the contractor desires flagging, the contractor shall bear the cost of the flagging as per standard spec 107.14.1(4).

8. Utilities.

This contract does not come under the provision of Administrative Rule Trans 220.

There are underground and overhead utilities facilities located within the project limits. Utility adjustments required for this construction project are noted below. However, if the contractor elects to make arrangements with any of the utilities for temporary adjustments or outages, it will be at no additional cost to the department. Coordinate construction activities with a call to Diggers Hotline or a direct call to the utilities that have facilities in the area as required per statutes. Use caution to insure the integrity of underground facilities and overhead lines.

Bidders are advised to contact the utility companies listed in the plans, prior to preparing their bids, to obtain current information on existing and new locations and the status of any utility relocation work stated herein.

Project ID 2216-01-70 and 2216-02-70

The following utilities are located within the project area:

AT&T of Wisconsin (AT&T):

AT&T has overhead facilities located on WE Energies pole lines along the project. Adjustment to their overhead facilities will be done by AT & T in conjunction with work by WE Energies pole relocations prior to the start of construction operations under this contract.

AT&T has buried facilities from Station 6+55 to Station 28+34. This line is 40' right (RT) of the reference line from Station 6+55 to Station 11+75, 40' to 53' RT of the reference line from Station 11+75 to Station 28+34.

AT&T has indicated that no adjustment to the buried facilities is anticipated with this project.

AT&T pedestals are located at Station 11+77, 48' RT, Station 12+57, 53' RT, Station 14+31, 50' RT, Station 16+68, 50' RT, and 28+34, 40' RT. AT&T has indicated that these pedestals do not require adjustment.

AT&T will complete the below adjustments before construction operations:

- Pole with 1 anchor and down guy at Station 13+53 45' LT will be moved north out of work area.
- Ped at Station 23+77 42' RT will be moved to Station 23+77 50' RT.
- Ped at Station 57+60 20' LT will be adjusted at the time of construction when the WE Energies pole and the concrete culvert and approach are removed. Contact Katie Heller at (414) 257-0253 within 24 hours of culvert and approach removal. AT&T has indicated the relocation work will take 20 days.
- Ped at Station 62+80 21' LT ped will be replaced with a manhole. We Energies has noted that this pole will not be replaced. Contact Katie Heller at (414) 257-0253 within 24 hours of brush grubbing in the area. AT&T has indicated the relocation work will be complete within 20 days of notification that the site is ready.

Conflicting cables and facilities per bullets 1 and 2 above will be relocated prior to start of DOT construction. Bullet #3 above will be completed within 20 days of the road contractor removing the driveway approach and concrete wall at the culvert. Bullet #4 above will be complete within 20 days of the contractor grubbing the brush from the area.

Two of the required adjustments listed on #1 above are dependent on the WE Electric pole removals. The pole removal at Pole at sta 13+53 45' LT described at #1 above is dependent on Time Warner's transfer work.

Contact Katie Heller at (414) 257-0253 to coordinate operations in Stage 1 and 1A. Contact David Ireland at (414) 257-0012 to coordinate operations in Stage 2 through 4.

Time Warner Cable Communications (TWC):

TWC has cable TV lines located on WE Energies pole lines along the project. Adjustment to their overhead facilities will be done by TWC in conjunction with work by WE Energies pole relocations prior to the start of construction operations under this contract.

Time Warner Cable will transfer existing aerial to new poles installed by WE-Energies from 12+00 RT to 16+80 RT. TWC will remove existing aerial guy and anchor at 13+53 LT. TWC to dig up existing UG cable and relocate existing pedestal 2' North at Station 23+75 RT. TWC will discontinue the existing shallow UG cables at Station 35+25 and bore new cables 11' below existing berm for ditch cut. TWC to wreckout existing aerial from Station 100+15 LT to Station 59+00 LT and build new aerial on new poles installed by WE-Energies from Station 100+25 RT to 62+40 RT. TWC to bore new UG cables crossing W Mill Rd at Station 62+40. TWC to discontinue exiting UG cables from Station 59+00 LT to Station 62+40 LT.

TWC has indicated that the above work will be complete prior to construction. If coordination is required, contact Steve Cramer at (414) 277-4045.

WE Energies – Electric Operations:

WE Energies has noted that any facilities not explicitly identified as being relocated or removed have been deemed to be not in conflict and will remain in place as is. It is expected that contractors will work safely around any facilities left within the work zone. If plans change such that facilities become in conflict, it is expected that WE Energies will be notified prior to road construction. Coordination will be required in these instances with the road contractor.

Locations of new facilities may change based on negotiated agreements between landowners and WE Energies.

WE Energies plans to relocate its facilities prior to the start of road construction, with the exception of the following:

- * Poles to be removed on the south side Mill Road from Mill Road Ct. east to RR tracks will remain until road closure for Stage 1 of project.
- * For final pole removal from Mill Road Court east to RR tracks highway contractor to notify Pamela Rakauskas at (414) 944-5549 15 working days prior to scheduled date of road closure for Stage 1.

WE Energies has cable/conduit and manholes located from Mill Road Court to Sidney Place. WE Energies has indicated that the cable/conduit and manholes will not be relocated for this project. Contact We Energies at 414- 944-5549 immediately if facilities are exposed during construction. Mechanical support of cable/conduit may be needed during storm sewer construction. WE Energies will coordinate the support of the cable/conduit.

The contract will adjust sidewalk location for pedestrian safety to fully include or exclude manhole covers within sidewalk on RR property near Sidney Place.

WE Energies will perform the following pole work prior to construction:

Station No.	Sequence No.	Pole No.	Work Proposed
8 + 27, 51.5 right	100	80-04476	No relocation
8 + 46, 61 left	102	79-06699	No relocation
9 + 40, 104.5 right	104	99-06402	No relocation
9 + 42, 48 right	106	99-6403	No relocation
10 + 65.9, 46.75 right	110	99-06401	Shift to 47.5 right
12 + 7.75, 46 right	120	16-NEW	Replace pole
12 + 10.75, 40.3 right	125	58-2896	Remove pole
13 + 49, 45 right	130	17-NEW	Replace pole
13 + 52, 40.4 right	135	59-1029	Remove pole
15 + 36, 43.4 right	140	16-NEW	Replace pole
15 + 38.7, 40.4 right	145	55-0917	Remove pole
16 + 80.9, 42.6 right	150	16-NEW	Replace pole
16 + 88, 40.1 right	155	59-1041	Remove pole
18 + 57.7, 42.7 right	160	59-1082	No relocation
20 + 31.3, 41.4 right	170	58-2897	No relocation
20 + 23.4, 48 left	172	06-12241	No relocation
19 + 69, 46 left	174	16-NEW	Install pole and anchor
21 + 31.4, 41.3 right	180	85-05220	No relocation
21 + 84.7, 41.2 right	190	61-1430	No relocation
23 + 93.5, 41.2 right	200	64-2161	No relocation
25 + 45.6, 38.4 right	210	16-NEW	Replace pole
25 + 51, 38.6 right	215	61-1426	Remove pole
27 + 16.3, 37 right	220	59-1026	No relocation
28 + 66, 34.75 right	230	61-1425	No relocation
30 + 47, 32.7 right	240	61-1275	No relocation
30 + 41.5, 56.4 left	246	16-NEW	Install pole to guy line angle
32 + 9.3, 37.1 right	250	16-NEW	Replace pole
32 + 9.5, 31.2 right	255	59-1043	Remove pole for
33 + 66.7, 49.4 right	260	16-NEW	Replace pole for
33 + 66.7, 44.1 right	265	59-1433	Remove pole for
35 + 22, 63 right	270	61-14285	No relocation- -new anchor
37 + 84, 48 left	302	09-03046	Move service pole to 37 +97, 60 left

Station No.	Sequence No.	Pole No.	Work Proposed
100 + 5.7, 19.1 left	376	61-1206	Keep pole-modify frame
100 + 26.6, 20.88 right	370	16-NEW	Install pole
100 + 29.2, 19.9 right	375	57-18549	Remove pole
56 + 36.9, 20.88 right	380	16-NEW	Install pole
56 + 33.8, 19.6 right	385	91-02047	Remove pole
56 + 37, 21.5 left	387	12-03176	Remove pole
57 + 12.5, 20.88 right	390	16- NEW	Install pole 2' clearance
57 + 9.5, 18.6 right	395	06-07047	Remove pole
57 + 60.9, 19.4 left	397	93-06069	Remove pole
57 + 91, 20.88 right	400	16-NEW	Install pole-2' clearance
57 + 94.1, 18.9 right	405	59-2079	Remove pole
58 + 76.7, 20.88 right	410	16-NEW	Install pole-2' clearance
58 + 74.2, 17.3 right	415	83-04989	Remove pole
59 + 2, 20 left	417	57-18678	Remove pole
59 + 87.9, 20.88 right	430	16-NEW	Install pole-2' clearance
59 + 88.1, 17.8 right	435	64-2355	Remove pole
60 + 27.3, 20.4 left	437	01-01513	Remove pole
60 + 86, 20.88 right	440	16-NEW	Install pole-2' clearance
61 + 47, 79.5 RIGHT	442	16-NEW	Install pole
61 + 13.8, 20.5 left	447	91-10523	Remove pole
61 + 66, 20.89 right	450	16-NEW	Install pole-2' clearance
61 + 56, 19.4 right	455	70-0482	Remove pole
61 + 55, 20.5 left	457	60-1168	Remove pole
62 + 24.5, 20.88 right	460	16-NEW	Install pole-2' clearance & SS impact
62 + 34.3, 35.6 right	462	16-NEW	Install
62 + 39.7, 19.3 right	465	91-02041	Remove pole
62 + 80, 21.5 left	467	81-03591	Remove pole
63 + 19.6, 54.4 right	470	16-NEW	Install pole-2' clearance
63 + 13, 20.2 right	475	00-02545	Remove pole
64 + 1, 22.65 left	482	72-1900	Keep light pole

WE Energies will perform the following manhole work in conjunction with paving operations.

Notify Pamela Rakauskas at 414-944-5549 10 working days prior to time for need of adjustments and follow up with notification 48 hours prior to actual need.

Station No.	Sequence No.	Manhole No.	Work Proposed
57+20, 6' LT	10	MH72-472	Adjust cover
61+25, 32' RT	20	MH72-471	Adjust cover
61+32, 14' LT	30	MH72-470	Adjust cover
62+78, 12' LT	40	MH72-468	Adjust cover

64+02, 39' LT	50	MH72-446	Adjust cover
64+48, 28' RT	60	MH72-445	Adjust cover
65+05, 28' RT	70	MH72-469	Adjust cover

WE Energies – Gas Operations:

We Energies Gas will relocate or adjust the following We Energies facilities as follows prior to construction:

- 1) W. Mill Rd. from Station 8+25 @ 35" RT to 9+50 @ 90" RT, Station 9+50 to 10+50 @ 90" RT. Station 10+50 to Station 17+ 25 @ 45' RT.--- 4" Plastic.
- 2) W. Mill Rd. from Station: 17+25 to Station: 25+35 at 30'-35' RT---4"Plastic
- 3) W. Mill Rd. @ N 40th St N/S rd. crossing @ Station 19+80 32' RT to 180' LT --2"Plastic
- 4) W. Mill Rd. from Station 13+50 to 19+80 @ 59' LT.--2"Plastic
- 5) W. Mill Rd. from Station: 17+35 to Station 28+00 @ 48-49' RT--4"Plastic
- 6) W. Mill Rd. from Station 28+00 to Station: 31+40 @ 44' RT--4"Plastic
- 7) W. Mill Rd. from Station: 31+40 to Station: 38+00 exist main to remain in place during const. 42'-82' RT-- 4"Plastic
- 8) W. Mill Rd. from Station 38+00 to Station 44+70 @ 42' RT to 83" RT--4"Plastic
- 9) W. Mill Rd. @ N. Teutonia Ave (west side crossing) Station: 301+00 to Station: 302+20 at 60'-75' RT--4"Plastic
- 10) N. Teutonia Ave. has a 8" Steel HP gas main that will remain in place during const. Location is 15' West of Center Line of N. Teutonia Ave.
- 11) W. Mill Rd. from Station: 44+70 to Station: 55+00 @ 35'-40' RT. Cross N. Teutonia Ave. @ Station 301+00 with new main---4"Plastic.
- 12) W. Mill Rd. from Station: 55+00 to Station: 66+25 @ 42' RT—4" Steel & 4"Plastic.\
- 13) N. Teutonia Ave. (eastside) From the S right-of-way line of W. Mill Rd south for 160'.to serve 3142W. Mill Rd.--- 2"Plastic
- 14) W. Mill Rd. Ct. from Station: 100+15 to Station: 99+00 @ 22' RT---2"Plastic

Gas main to be discontinued prior to construction:

- 1) W. Mill Rd. from Station. 8+25 to Station:10+75' @ 35' RT--6"Steel
- 2) N/S crossing @ N. 40th St & W. Mill Rd. @ 19+80 from 47' LT to 180' LT --2" PE & 2"Steel
- 3) N 43rd St from 202+47 to 203+75 @ 40' RL & 203+75 to 205+00 @ 22'RT Mill Rd.---4"Steel
- 4) W. Mill Rd. Station: 13+55 to Station: 19+80 @ 40'LT---2"Steel
- 5) W. Mill Rd. Station: 19+80 to Station: 25+00 @ 47' RT---" PE & 4"Steel
- 6) W. Mill Rd. Station 38+00 to Station: 44+92 from 40'-83 RT ---4"Steel
- 7) N. Teutonia Ave. N/S crossing W. Mill Rd. (west side) from STA: 301+10 to Station: 302+20LT @ 48'LT--6" Steel N. Teutonia Ave. N/S crossing W. Mill Rd. (east side) from 380' RT. to 280' LT---3" Steel
- 8) W. Mill Rd. from Station: 44+92 to Station: 55+00 @ 30'-50' LT ---6" Steel
- 9) W. Mill Rd. Ct. from Station: 55+00 to 285' west @ 13' RT---4" Steel
- 10) W. Mill Rd. Station 55+00 to 66+25 @ 15' RT---3" & 4" Steel
- 11) N. Sidney Pl. @ 25' East of Center Line of N. Sidney Pl. 3" Steel from 13' RT to 100' LT

COATING SAMPLES WILL BE OBTAINED FROM DISCONTINUED MAIN AND ANALYZED FOR ASBESTOS DURING GAS MAIN INSTALLATION. THIS INFORMATION WILL BE GIVEN TO MILWAUKEE COUNTY PRIOR TO ROAD CONSTRUCTION. ANY CONTAMINATED COATED GAS MAIN SEGMENT THAT IS IN DIRECT CONFLICT WITH THE ROAD CONSTRUCTION OPERATION WILL, WITH A FIVE DAY PRIOR NOTICE, BE ABATED AND/OR REMOVED AND DISPOSED OF BY WE-ENERGIES ABATEMENT CONTRACTOR WITHIN TWO WORKING DAYS.

Valve boxes will be adjusted in conjunction with paving. Contact La Troy Brumfield at (414) 221-5617 10 days prior to paving to coordinate valve box adjustments.

Any facilities not explicitly identified as being relocated have been deemed to be not in conflict and will remain in place as is. It is expected that contractors will work safely around any facilities left within the work zone.

Milwaukee Metropolitan Sewerage District (MMSD):

MMSD has a Metropolitan Interceptor Sewer (MIS) located from Station 6+55 to Station 9+15. The MIS is 10' LT of the R/L. No conflict with this MIS is anticipated with this project.

MMSD has a Metropolitan Interceptor Sewer (MIS) located from Station 12+55 to Station 33+00. The MIS is 20' LT of the R/L. The MIS follows the section line and leaves the

project limits at Station 35+50, 58' RT of the R/L. The MIS rejoins the project in W. Mill Road Ct at Station 100+00, 8' LT of the R/L of W. Mill Road Ct. The MIS reenters the W. Mill Rd limits at Station 55+00 and runs to the end of the project 8' LT of the R/L of W. Mill Rd. No conflict with this MIS is anticipated with this project.

MMSD has a diversion structure at the intersection of W. Mill Rd and N. Sidney Pl at approximately Station 65+00. This structure will remain in place and no removal or relocation will be done. This structure is approximately 20 feet in diameter and has an asphalt overlay of approximately 2 inches. There are two manhole frames on the structure that will not be adjusted. Remove the existing asphalt overlay with caution not to damage the structure cover. The asphalt paving contractor must notify Debra Jensen at (414) 225-2143 5 days prior to work on this structure. A representative of MMSD will be present during removal and paving operations on this structure. Place the HMA pavement type E-3 to match the existing manhole elevations at Station 65+00, 4'LT and at Station 65+04, R/L.

There are 5 MIS manholes that require adjusting as shown in the plans. MMSD will adjust the MIS manholes as shown on the plans and details in coordination with paving operations. Contact Larry Anderson at (414) 225-2241 five days prior to the need for adjustment.

The MIS manholes are at the following locations:

STATION	OFFSET	WORK
9+15	20' LT	ADJUST
22+53	22' LT	ADJUST
24+96	23' LT	ADJUST
35+04	41' RT	ADJUST
64+86	8' LT	ADJUST
65+00	4' LT	NONE
65+04	R/L	NONE

Midwest Fiber Networks

Midwest Fiber Networks has an existing fiber cable buried from Station 63+44 to the east project terminus. The line is located 16' RT of the R/L from Station 63+44 to Station 64+91, and 38' RT of the R/L from Station 65+50 to the eastern project terminus. Notify Richard Trgovec at (414) 672-5612, 48 hours prior to any ground disturbing operations.

Norlight (Windstream)

Norlight (Windstream) has an existing fiber cable buried which crosses the project at approximately Station 39+50. The line is roughly perpendicular to the R/L. The utility will relocate this line during construction. Notify Jim Kostuch at (262) 792-7938, 48 hours prior to any ground disturbing operations. Norlight work is anticipated to take three days.

City of Milwaukee:

The City of Milwaukee has water mains and valves, sanitary sewers and manholes, communication conduits and manholes, storm sewers, inlets and manholes; and street lights throughout the project length. The City of Milwaukee owns and maintains the traffic signals at N. 43rd St and at N. Teutonia Ave. City of Milwaukee facility adjustments and/or relocations are as follows:

Water Mains and Valve Boxes:

The approximate location of the water main within the project boundaries are as follows:

The City of Milwaukee has a 16" water main 27' RT of the R/L from Station 6+55 to 21+00. This water main is on the R/L and in a steel conduit from Station 21+50 to 24+50. This water main is 22' RT of the R/L from Station 25+00 to 28+50. This water main is 2 feet north of the south right of way line from Station 29+00 to 39+00. This water main is 55' RT of the R/L and in a steel conduit from Station 39+50 to 41+50. This water main is 2 feet north of the south right of way line from Station 42+00 to 44+50. This water main is 15 feet LT of the R/L from 44+75 to 46+00. No adjustment to water main is anticipated with this project.

The City of Milwaukee has a 12" water main 12' LT of the R/L from Station 46+00 to 55+00. This water main is 14.75' LT of the R/L from Station 55+50 to Station 61+00. No adjustment to water main is anticipated with this project.

The City of Milwaukee has an 8" water main 55' LT of the R/L from Station 10+50 to 23+00. The 8" water main from Station 20+15 to 23+00 will be discontinued with this project.

The City of Milwaukee has an 8" water main 43' LT of the R/L from Station 24+75 to 30+50. This water main is 2 feet south of the north RT of way line from Station 30+75 to 38+50. The 8" water main from Station 24+75 to 31+50 will be discontinued with this project.

There is a 16" water main crossing W. Mill Rd. at Station 10+40. There is an 8" water main crossing at Station 21+60. There is an 8" water main crossing at Station 45+05. There is a 12" water main crossing at Station 45+80. No adjustment of these water mains are anticipated with this project.

There are 28 water valve boxes that require adjustment by the contractor. There are 15 hydrants that require removal and 11 that require installation by the contractor. Water valve adjustment and hydrant work will be inspected by the City of Milwaukee. Notify Jesse Hernandez at (414) 708-2670 three days prior to adjustment activities.

The proposed construction work and the equipment used shall not affect the integrity of the existing water mains and appurtenances. If damaged, the contractor will be responsible for all costs incurred to restore the water main to its original condition. Emergency water main break contact number is (414) 286-3710.

Sanitary Sewers and Manholes:

The City of Milwaukee has an 18" sanitary sewer located 8' LT of the R/L from Station 9+49 to Station 20+03. No adjustment of the sanitary sewer is anticipated.

The City of Milwaukee has a 12" sanitary sewer located 8' LT of the R/L from Station 20+03 to Station 25+01. This sewer is located 18' LT of the R/L from Station 28+50 to 31+31. This sewer offset varies to 14' RT of the R/L at Station 34+10, to 12' RT at Station 35+82, to 10' LT at Station 38+72, to 2' RT at Station 41+63, to 7' RT at Station 42+65. No adjustment of the sanitary sewer is anticipated.

The City of Milwaukee has a 15" sanitary sewer located 64' LT of the R/L of W. Mill Rd from Station 25+25 to Station 29+80. No adjustment of the sanitary sewer or the manholes of this line is anticipated.

The City of Milwaukee has a 12" sanitary sewer located from 27' LT of the R/L at Station 45+88 to 34' LT at Station 49+28 to 38' LT at Station 50+11, to 21' LT at Station 53+05 to 15' RT at Station 55+34. This line continues to the east at 15' RT of the R/L to Station 61+27. No adjustment of the sanitary sewer is anticipated.

There are 23 sanitary manholes that require adjusting or reconstructing by the contractor as shown in the plans. Adjust or reconstruct the manholes as noted on the plans. Sanitary sewer manhole adjustments and reconstructions will be inspected by the City of Milwaukee. Notify Roger Reed at (414) 708-5108 three days prior to adjustment activities. Install new internal sanitary manhole seals on all sanitary manholes. The internal sanitary manhole seal will be paid for at the contract unit price. A new frame and grate may be required as directed by the City of Milwaukee inspector. The new frame and lid, if directed, will be paid under the appropriate bid item at the contract unit price.

The sanitary manholes are at the following locations:

STATION	OFFSET	WORK
9+49	8' LT	ADJUST
10+40	46' LT	ADJUST
10+50	8' LT	ADJUST
13+36	8' LT	ADJUST
16+70	8' LT	ADJUST
20+03	12' LT	RECONSTRUCT
21+68	8' LT	RECONSTRUCT
25+02	10' LT	RECONSTRUCT
28+52	18' LT	RECONSTRUCT
31+27	18' LT	RECONSTRUCT
34+10	15' RT	RECONSTRUCT
35+80	11' RT	RECONSTRUCT

38+72	10' LT	RECONSTRUCT
41+63	2' RT	ADJUST
42+65	7' RT	ADJUST
45+87	27' LT	ADJUST
49+28	34' LT	ADJUST
50+11	38' LT	ADJUST
53+05	21' LT	ADJUST
55+00	13' RT	RECONSTRUCT
58+02	14' RT	RECONSTRUCT
60+90	15' RT	ADJUST
500+08 N 42ND ST	2' RT	ADJUST

Street Lighting:

The City of Milwaukee has street light facilities located in the medians at the intersection of N. 43rd St. and W. Mill Rd., and in the median from N. 43rd St. to N. 42nd St. and at the north curb line from N. 43rd St. to N. 40th St. These nine Street light poles will temporarily remain and will be feed in overhead. These must remain due to the trees remaining during stage 1 of construction. After the contractor removes all the trees for Stage 2 and Stage 3, street lighting forces will remove these nine light poles prior to the start of construction operations under this contract.

The City of Milwaukee has street light facilities on the south side of W. Mill Rd. on WE Energies poles from the Union Pacific Railroad crossing to N. Teutonia Ave. These facilities will be removed when the WE Energies poles are relocated prior to the start of construction operations under this contract.

The City of Milwaukee has street light facilities on both sides of W. Mill Rd. from N. Teutonia Ave to W. Mill Road Ct. Contact Dennis Miller, City of Milwaukee Street Lighting Supervisor at (414) 286-5942 five days prior the start of construction operations under this contract. If relocation work is needed, it is anticipated to take five days for relocation work to be completed.

The City of Milwaukee has street light facilities on WE Energies poles on the north side of W. Mill Rd. from W. Mill Road Ct. to the east city limits. These facilities will be relocated after WE Energies' new pole line is installed along the south side of W. Mill Rd. from W. Mill Road Ct. to the east city limits prior to the start of construction operations under this contract.

The City of Milwaukee will install temporary overhead facilities and relocate facilities as needed before roadway construction starts. During and immediately after construction, the City of Milwaukee will install new lighting facilities in coordination with this project with its own forces. Coordinate operations with Dennis Miller, City of Milwaukee Street

Lighting Supervisor at (414) 286-5942. Keep the area behind the curb and gutter free from over pour and other debris.

Traffic Signals:

The City of Milwaukee has traffic signals at the intersection of N. 43rd St and W. Mill Rd and at the intersection of N. Teutonia Ave and W. Mill Rd. The City of Milwaukee will remove the existing signals prior to construction with its own forces. The City of Milwaukee will install, maintain and remove temporary signals at N. 43rd St and at N. Teutonia Ave. Contact Scott Reinbacher at (414) 286-3232 ten days prior to the start of Stage 1 and Stage 2B operations to have the signals removed and temporary signals installed. Contact Scott Reinbacher at (414) 286-3232 to have the temporary signals adjusted 5 days prior to changing the traffic patterns due to staged construction.

City of Milwaukee Underground Conduit (CUC)

The City of Milwaukee CUC has an existing buried communications conduit in W. Mill Rd. The conduit is located 5 feet LT of the R/L from Station 6+55 to Station 9+70. No adjustment of this line is anticipated. The conduit is located 5 feet LT of the R/L from Station 9+70 to Station 13+30. No adjustment of this line is anticipated. There is a manhole located at Station 9+70, 5' RT and a manhole at Station 13+30, 5' LT. The contractor is to adjust these manholes with the paving operations.

The City of Milwaukee CUC has an existing buried communications conduit in N. 43rd St. The conduit crosses W. Mill Rd at Station 9+70. No adjustment to this line is anticipated. There is a manhole in N. 43rd St. at Station 9+77, 80' LT. The contractor is to adjust this manhole with paving operations.

The City of Milwaukee CUC has an existing buried communications conduit in N. Teutonia Ave. The conduit crosses W. Mill Rd. at Station 45+74. No adjustment to this line is anticipated. There is a manhole located at Station 45+58, 61' LT and a manhole at Station 45+81, 51' RT. The contractor is to adjust these manholes with the paving operations.

The City of Milwaukee has indicated that new CUC facilities will be constructed by the contractor with this project as shown in the project plans. Contact Bryan Pawlak at (414) 286-3686 for coordination.

Storm Sewers and Manholes:

The City of Milwaukee has a 30" storm sewer located 18' RT of the R/L from Station 6+55 to Station 9+20. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 15" storm sewer located 33' RT of the R/L from Station 10+13 to Station 13+23. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 60" storm sewer located 11' RT of the R/L from Station 9+20 to Station 13+20. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 66" storm sewer located 6' to 11' RT of the R/L from Station 13+20 to Station 20+35. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 72" storm sewer located 11' RT of the R/L from Station 20+35 to Station 26+75. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 48" storm sewer located 1' RT of the R/L from Station 26+75 to Station 29+60. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 36" storm sewer located 35' RT of the R/L from Station 29+60 to Station 38+35. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 27" storm sewer located 18' to 35' RT of the R/L from Station 38+35 to Station 41+65. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 24" storm sewer located 35' RT of the R/L from Station 41+65 to Station 42+70. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 12" storm sewer located 10' RT of the R/L from Station 44+85 to Station 45+45. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 21" storm sewer located 15' RT of the R/L from Station 45+45 to Station 48+50. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 24" storm sewer located 22' RT of the R/L from Station 48+50 to Station 50+85. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 27" storm sewer located 10' RT of the R/L from Station 50+85 to Station 57+85. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 36" storm sewer located 18' RT of the R/L from Station 57+85 to Station 60+05. No adjustment of the storm sewer is anticipated.

The City of Milwaukee has a 42" storm sewer located 18' RT of the R/L from Station 60+05 to Station 63+50. No adjustment of the storm sewer is anticipated. There are 28 storm sewer manholes that require adjusting, discontinuing or reconstructing by the contractor as shown in the plans. Adjust or reconstruct the manholes as noted on the plans. A new frame and cover may be required as directed by the engineer. The new frame and cover, if directed, will be paid under the appropriate bid item at the contract unit price.

There are 33 storm sewer inlets that require removal, adjusting or reconstructing by the contractor as shown in the plans. Remove, adjust or reconstruct the manholes as noted on the plans. A new frame and grate may be required as directed by the engineer. The new frame and grate, if directed, will be paid under the appropriate bid item at the contract unit price. See the drainage tables in the plan for locations of the storm manholes and inlets.

City of Glendale:

The City of Glendale has sanitary sewers and manholes from Sidney Place to the eastern terminus of the project. City of Glendale facility adjustments are as follows:

Sanitary Sewers and Manholes:

The City of Glendale has a sanitary sewer in N. Sidney Pl. 8 feet LT of the centerline of N. Sidney Pl. The City of Glendale has a sanitary sewer in W. Mill Rd from Station 65+84 to Station 65+95 on the R/L of W. Mill Rd. No adjustment to the existing sanitary sewers is anticipated with this project. There are two sanitary manholes that require adjusting or reconstructing by the contractor as shown in the plans. Adjust or reconstruct the sanitary sewer manholes as noted on the plans. A new frame and grate may be required as directed by the City of Glendale. The new frame and lid, if directed, will be paid under the appropriate bid item at the contract unit price. Contact David Eastman at (414) 228-1746 if coordination is required.

The sanitary manholes are at the following locations:

STATION	OFFSET	WORK
64+89	43' LT	ADJUST
65+45	1' RT	ADJUST

Railroad Fiber Optic Lines**Union Pacific Railroad Company Fiber Optic Lines**

Call "Diggers Hotline" and additionally contact the Union Pacific Railroad Company "call before you dig" office at (800) 336-9193. Normal business hours are 7:00 AM to 9:00 PM, Central Time, Monday through Friday, except holidays. Reference Butler, Wisconsin, Mile Post 92.6 on the Granville Subdivision to verify the location of fiber optic lines located on railroad right-of-way at the construction site. Calls will be routed at all times in case of an emergency.

Canadian National Railway Fiber Optic Lines

Call "Diggers Hotline" and additionally contact Jackie Macewicz at (715) 345-2503 five working days before any work is performed. The railroad will determine if fiber optic or other type of cable is buried in the general work location. If present, contact the owner of the fiber optic or cable line to determine its exact location.
107-065 (20080501)

9. Municipality Acceptance of Water Main Construction.

Both the department and City of Milwaukee personnel will inspect construction of sanitary sewer and water main under this contract. However, testing, and acceptance of the water main construction will be by the City of Milwaukee.

105-001 (20140630)

10. Reference Construction Specifications.

The specifications for the water main bid items reference the Standard Specifications for Sewer and Water Construction in Wisconsin and the City of Milwaukee Design Standards and Construction Specifications referenced in this contract. If there is a discrepancy or conflict between the referenced specification and the standard specifications regarding contract administration, part 1 of the standard specifications governs.

105-002 (20130615)

11. Erosion Control.

Perform the work under this item according to the requirements of standard spec 107.20, and as hereinafter supplemented.

Take adequate precautions to install and maintain necessary erosion and sediment control during construction operations at curbs and gutters, and at other locations as determined by the engineer. Protect storm sewer inlets at locations determined by the engineer with a filter fabric meeting accepted design criteria, standards and specifications. Protect all waterway crossings along the project from erosion and siltation

Provide an erosion control implementation plan (ECIP) 14 days prior to the pre-construction conference. Do not start construction operations until a written approval of the ECIP has been granted from the department.

Excess fill material, spoils and equipment should be stockpiled on upland areas an adequate distance away from wetlands, storm sewer inlets, floodplains, critical habitat and the waterways. Protect piles of stockpiled soil against erosion and do not create nuisance dust emissions.

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.

Pursue operations in a timely and diligent manner, continuing all construction operations methodically from the initial removals and topsoil stripping operations through the subsequent grading, paving, and re-topsoiling to minimize the period of exposure to possible erosion.

Topsoil graded areas, as designated by the engineer, immediately after grading has been completed within those areas. Sod and fertilize all topsoiled areas within 3 business days after placement of topsoil.

The construction site activities will be regulated under Ch. 283, Wis. Stats., Ch. NR216, Wis. Adm. Code. All erosion control and storm water management activities undertaken at the site must be done according to the terms and conditions of NR216.

Do not locate construction staging areas or fill in any nearby wetlands.

Protect all waterway crossings along the project from erosion and siltation.

12. Dust Control Implementation Plan.

A Description

Develop, update, and implement a detailed Dust Control Implementation Plan (DCIP) for all land-disturbing construction activities and associated impacts both within the project site boundaries and outside the project site boundaries. Incorporate into the DCIP the contract bid items specified in this article.

B (Vacant)

C Construction

C.1 General

Minimize dust emissions resulting from land disturbing activities. Do not generate excessive air borne particulate matter (PM) or nuisance dust conditions. The contractor has direct responsibility for controlling dust at all times throughout the duration of the contract, 24 hours per day, 7 days per week, including non-working hours, weekends, and holidays.

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

C.2 Dust Control Implementation Plan Contents

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

The DCIP includes, but is not limited to, all of the following:

1. A single contact person with overall responsibility for the DCIP development as well as surveillance and remediation of job related dust. Include the following:
 - Name, firm, address, and working-hours phone number.
 - Non-working-hours phone number.
 - Email address.
2. Individual contact persons and their respective areas of responsibility. Include the following:
 - Name, firm, address, and working-hours phone number.
 - Non-working-hours phone number.
 - Email address.

3. A site map locating project features, the job site boundaries, all ingress and egress points, air intakes and other dust-sensitive areas, and all public and private paved surfaces within and immediately adjacent to the job site. Show where specific land disturbing, dust generating activities will occur and, to the extent possible, where the contractor plans to employ various dust control or prevention strategies.
4. A matrix showing, for each anticipated land disturbing, dust generating activity, the following:
 - Preventive measures that will be employed.
 - The applicable contact person.
 - The contractor's timetable and/or surveillance measures used to determine when remediation is required.
 - The specific dust control and remediation measures that will be employed. List the specific contract bid items that will be used for payment. Also indicate costs that are incidental to the contract.
 - Both maintenance and cleanup schedules and procedures.
 - How excess and waste materials will be disposed of.
5. A description of how off-site impacts will be monitored and dealt with.

C.3 Updating the Dust Control Implementation Plan

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

C.4 Dust Control Deficiencies

Correct engineer identified dust control deficiencies within the time the engineer specifies. The engineer will allow from 30 minutes to 24 hours from the time the engineer notifies the contractor in writing of the deficiency. Deficiencies include, but are not limited to, actions or lack of actions resulting in excessive dust, failing to comply with the contractor's dust control implementation plan or associated special provisions, and failing to properly maintain equipment.

D Measurement

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

Measurement under the DCIP will include, but is not limited to, the contract bid items listed below:

623.0200	Dust Control Surface Treatment
624.0100	Water

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

E Payment

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

If the contractor fails to correct a dust control deficiency within the specified time, the department will deduct \$5,000 per day from payments due the contractor for each calendar day, or fraction of a day, that the deficiency exists. The department will assess time beginning with contractor notification and ending when the engineer accepts the correction. After expiration of the specified time for correction, the engineer may correct, or have a third party, correct the deficiency. In addition to the \$5,000 per day deduction, the department will deduct costs of this correction from payments due the contractor.

SEF Rev. 091120

13. City of Milwaukee Forestry.

General:

Manually cut for the removal of sod and soil in order to establish a finish grade within 4 feet of existing trees if necessary.

Do not park or store construction equipment, cars, trucks or materials on any median or tree border on adjacent roadways.

Root foundations must be adequate to withstand heavy windstorms.

Do not cut root systems for installations of any type of cable or conduit. Contact James Kringer at (414) 703-2428 for directional boring specifications.

Use caution at all times during construction to avoid damage to the roots, trunks and branches of all street trees.

14. Clearing and Grubbing, Emerald Ash Borer.

This applies to projects in the emerald ash borer (EAB) quarantined zones to include Fond du Lac, Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties.

Supplement standard spec 201.3 with the following:

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

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

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

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

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

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

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

ATCP 21.17 Emerald ash borer; import controls and quarantine.

Importing or Moving Regulated Items from Infested Areas; Prohibition.

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

- (a) Import a regulated item under sub. (2) into this state if that item originates from an emerald ash borer regulated area identified in 7CFR 301.53-3.

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

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

Regulated Items. The following are regulated items for purposes of subparagraph (1):

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

Regulatory Considerations

The quarantine means that ash wood products may not be transported out of the quarantined area.

Clearing and grubbing includes all ash trees that are to be removed from within the project footprint. If ash trees are identified within clearing and grubbing limits of the project, the following measures are required for the disposal:

Chipped Ash Trees

- May be left on site if used as landscape mulch within the project limits. If used as mulch on site, chips may not be applied at a depth greater than standard mulch applications as this will impede germination of seeded areas.
- May be buried on site within the right-of-way according to standard spec 201.3 (14).
- May be buried on adjacent properties to projects within the quarantined zone with prior approval of the engineer according to Standard spec 201.3 (15).
- May be trucked to a licensed landfill within the quarantined zone with the engineer's approval according to standard spec 201.3 (15).
- Burning chips is optional if in compliance with standard spec 201.3.

- Chips must be disposed of immediately if not used for project mulching and may not be stockpiled and left on site for potential transport by others. Chips may be stockpiled **temporarily** if they will be used for project mulching and **are not readily accessible to the public**.
- Chipper equipment must be cleaned following post-chipping activities to ensure no spread of wood chip debris into non-quarantined counties.

Ash logs, Branches, and Roots

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

Furnishing and Planting Plant Materials

Supplement standard spec 632.2.2 with the following:

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

Updates for Compliance

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

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

Regulated Items

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

15. Construction Trenches.

Upon completion of each work day and when work is not in progress, plate all trenches within the roadway resulting from sewer installations or similar construction activities, which are not fully backfilled, with steel plates suitable for carrying a vehicle as directed by the engineer. The plating shall be in addition to the barricades and traffic control devices required for lane closure or traffic control. Plating is incidental to the item of work that caused the need for plating.

16. Notice to Contractor – Contamination Beyond Construction Limits.

Contaminated soil is present at the following site:

Station 16+50 to 16+90 beyond the project limits right.

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

The Hazardous Materials Report is available by contacting: Andrew Malsom Wisconsin Department of Transportation, 141 NW Barstow, Waukesha, WI 53187, (262) 548-6705, Andrew.Malsom@dot.wi.gov.
107-100 (20050901)

17. Notice to Contractor – Excavation near Graceland Cemetery.

The contractor is notified that no work on the north side the project can be done from Station 6+75 to 10+00 until authorized by the Wisconsin Historical Society (WHS). Coordination with WHS will be done by the department by November 30, 2016.

The contractor is also notified that no excavation may occur north of the existing fence line at Graceland Cemetery. No disturbance of the fence is allowed.

The station range for this restriction is 6+75 to 9+00 left.

18. 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 9:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer.
(051206)

19. Coordination with Businesses and Residents.

The contractor shall arrange and conduct a meeting between the contractor, the department, affected residents, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting at least one week prior to the start of work under this contract and hold one meeting per month thereafter. The contractor shall arrange for a suitable location for the meeting(s) that provides reasonable accommodation for public involvement. The department will prepare and coordinate publication of the meeting notices and mailings for the meeting(s). The contractor shall schedule the meeting(s) with at least two weeks prior notice to the engineer to allow for these notifications.
108-060 (20141107)

20. Excavation Below Subgrade (EBS).

In the presence of the engineer and prior to placement of the base courses test roll all roadways as specified in the special provision Test Rolling, to gain acceptance of the subgrade.

EBS may be necessary depending on the conditions found in the field and test rolling results. A copy of the Geotechnical Exploration Report is available upon request to the engineer in the field.

No payment to the contractor will be made for those areas where the contractor has performed EBS without approval of the engineer in the field.

21. 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://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/rdwy/default.aspx>

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 subplot 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://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/appr-prod/qual-labs.aspx>

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 two 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 two 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 (20151210)

22. Abandoning Sewer, Item 204.0291.S.

A Description

This special provision describes abandoning existing sewer by filling it with cellular concrete according to the pertinent requirements of standard spec 204 and standard spec 501, as shown in the plans, and as hereinafter provided.

B Materials

Provide cellular concrete meeting the following specifications: 1 part cement, 1 part fly ash, 8 parts sand, or an approved equal, and water. Provide cement meeting the requirements of standard spec 501.2.1 for Type 1 Portland Cement. Provide sand meeting the requirements of standard spec 501.2.5.3. Provide water meeting the requirements of standard spec 501.2.4.

C Construction

Fill the abandoned sewer pipe with cellular concrete as directed by the engineer. In the event that the sewer cannot be completely filled from existing manholes, tap the sewer where necessary and fill from these locations.

D Measurement

The department will measure Abandoning Sewer in volume by the cubic yard according to standard spec 109.1.3.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
204.0291.S	Abandoning Sewer	CY

Payment is full compensation for furnishing all materials and excavating and backfilling where necessary.

204-050 (20080902)

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

A Description

A.1 General

This special provision describes excavating, loading, hauling, and disposing of petroleum contaminated soil at a DNR approved bioremediation facility. The closest DNR approved bioremediation facility is:

Advanced Disposal Emerald Park Landfill, LLC
W124 S10629 S. 124th St
Muskego, WI 53150
Phone (414) 529-1360

Waste Management Orchard Ridge Landfill
N96 W13503 County Line Rd.
Menomonee Falls, WI 53051
Phone (262) 253-8620

Perform this work according to standard spec 205 and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated soil.

A.2 Notice to the Contractor – Contaminated Soil Location(s)

The department completed testing for soil and groundwater contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following location(s) as shown on the plans:

1. Station 10+35 to 11+00, from approximately 50 feet to 115 feet left of reference line, from approximately 3 to 9 feet bgs. Soil is contaminated with benzene. Approximately 0 cubic yards (approximately 0 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this area. Excavation in this area is less than 3 feet.
2. Station 10+40 to 1100, from approximately 15 feet to 80 feet right of reference line, from approximately 0 to 4 feet bgs. Soil is contaminated with lead. Approximately 32 cubic yards (approximately 55 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this area.
3. Station 46+80 to 47+20, from approximately 20 feet left of reference line to project limits left, from approximately 1 to 5 feet bgs. Soil is contaminated with lead. Approximately 7 cubic yards (approximately 12 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this area.
4. Station 54+20 to 55+00, from reference line to 50 feet right of reference line, from approximately 1 to 5 feet bgs. Soil is contaminated with petroleum and lead. Approximately 77 cubic yards (approximately 131 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this area.
5. Station 57+25 to 58+00, from project limits left to project limits right, from approximately 0 to 5 feet bgs. Soil is contaminated with petroleum and lead. Approximately 137 cubic yards (approximately 233 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this area.
6. Station 65+70 to 66+00, from approximately 25 feet right of reference line to project limits right, from approximately 1 to 5 feet bgs. Soil is contaminated with lead. Approximately 2 cubic yards (approximately 4 tons at an estimated 1.7 tons per cubic yard) of soil will be excavated from this area.

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer.

For further information regarding previous investigation and remediation activities at these sites contact:

Name: Andrew Malcom
Address: 141 NW Barstow Street, PO Box 798, Waukesha, WI 53187-0798
Phone: (262) 548-6705
Fax: (262) 548-6891
E-mail: andrew.malsom@dot.wi.gov

A.3 Coordination

Coordinate work under this contract with the environment consultant:

Consultant: TRC Environmental Corporation
Address: 150 N. Patrick Blvd. Ste. 180, Brookfield, WI 53045
Contact: Bryan Bergmann, P.G.
Phone: (262) 901-2126
Fax: (262) 879-1220
E-mail: bbergmann@trcsolutions.com

The role of the environmental consultant will be limited to:

1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
2. Identifying contaminated soils to be hauled to the bioremediation facility;
3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
4. Obtaining the necessary approvals for disposal of contaminated soil from the bioremediation facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least three calendar days prior to commencement of excavation activities in each of the contaminated areas.

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

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

A.4 Health and Safety Requirements

Add the following to standard spec 107.1:

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

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

B (Vacant)

C Construction

Add the following to standard spec 205.3:

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

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

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

D Measurement

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

E Payment

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

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

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

205-003 (20150630)

24. QMP Base Aggregate Dense 1 1/4-Inch Compaction, Item 371.1000.S.

A Description

- (1) This special provision modifies the compaction and density testing and documentation requirements of work done under the Base Aggregate Dense 1 1/4-Inch bid items. Conform to standard spec 305 as modified in this special provision and to the contract QMP Base Aggregate article.
- (2) Provide and maintain a quality management program. A quality management program is defined as all activities, including process control, inspection, sampling and testing, and necessary adjustments in the process related to construction of dense graded base which meets all the requirements of this provision.
- (3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:
<http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/default.aspx>
- (4) This special provision applies to Base Aggregate Dense 1 1/4-Inch material placed on the mainline traveled way and adjacent mainline shoulders according to the typical finished sections. Unless otherwise specified by the contract, all Base Aggregate Dense 1 1/4-Inch material placed on side roads, private and public entrances, ramps, tapers, turn lanes, and other locations not described as the mainline traveled way and its adjacent mainline shoulders is exempt from the compaction and density requirement modifications and testing contained within this special provision.

B (Vacant)

C Construction

C.1 General

- (1) The engineer shall approve the grade prior to placement of the base. Approval of the grade shall be according to applicable provisions of the Standard Specifications.

Add the following to standard spec 305.3.2.2:

- (3) Compact the 1 1/4-Inch dense graded base to a minimum of 93.0% of the material target density. Ensure that adequate moisture is present during placement and compaction operations to prevent segregation and to help achieve compaction.

The material target density will be identified using one of the following methods:

1. For 1 1/4-Inch dense graded base composed of $\leq 20\%$ reclaimed asphaltic pavement (RAP) or crushed concrete (RCA), as determined by classification of material (aggregate or RAP and/or RCA) and percentage by weight of each material type retained on the No. 4 Sieve: maximum dry density according to AASHTO T-180, Method D, with correction for coarse particles as determined by AASHTO T224, and modified to require determination of Bulk Specific Gravity (G_m) according to AASHTO T 85. Bulk Specific Gravities determined according to standard spec 106.3.4.2.2 for aggregate source approval may be utilized
2. For 1 1/4-Inch dense graded base composed of $>20\%$ RAP or RCA, as determined by classification of material (aggregate or RAP and/or RCA) and percentage by weight of each material type retained on the No. 4 Sieve, the contractor may choose from the following options:
 - a. Maximum dry density as determined by AASHTO T-180, Method D, with correction for coarse particles as determined by AASHTO T224, and modified to require determination of Bulk Specific Gravity (G_m) according to AASHTO T 85.
 - b. Maximum wet density as determined by AASHTO T-180, Method D, modified to define *Maximum Density* as the wet density in pounds per cubic foot of soil at optimum moisture content using Method D specified compaction, with correction for coarse particles as determined by AASHTO T224, and modified to require determination of Bulk Specific Gravity (G_m) according to AASHTO T 85.
 - c. Average of 10 random control strip wet density measurements as described in section C.2.5.1.
- (4) Base Aggregate Dense 1 1/4-Inch will be accepted for compaction on a target density lot basis.
- (5) Field density tests on materials using contractor elected target density methods C.1(3).2.b or C.1(3).2.c will not be considered for lot acceptance on the basis of compaction under the requirements of this provisions until the moisture content of the in-place material is less than 2.0 percentage points above the maximum wet density

optimum moisture or 2.0 percentage points of the average moisture content of the 10 density tests representing a control strip, respectively.

C.2 Quality Management Program

C.2.1 Quality Control Plan

- (1) Submit a comprehensive written quality control plan to the engineer no later than 10 business days before placement of material. Do not place any dense graded base before the engineer reviews and accepts the plan. Construct the project as the plan provides.
- (2) Do not change the quality control plan without the engineer's review and acceptance. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in the contractor's laboratory as changes are adopted. Ensure that the plan provides the following elements:
 1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
 2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication process that will be used, and action time frames.
 3. A list of source locations, section and quarter descriptions, for all aggregate materials requiring QC testing.
 4. Descriptions of stockpiling and hauling methods.
 5. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.
 6. Location of the QC laboratory, retained sample storage, and other documentation.
 7. A summary of the locations and calculated quantities to be tested under this provision.
 8. A description of placement methods and operations. Including, but not limited to: staging, construction of an initial working platform, lift thicknesses, and equipment.

C.2.2 Pre-Placement Meeting

A minimum of two weeks prior to the start of placement of Base Aggregate Dense 1 1/4-Inch material, hold a pre-placement meeting at a mutually agreed upon time and location. Present the Quality Control Plan at the meeting. Attendance at the pre-placement meeting is mandatory for the project superintendent, quality control manager, project inspection and testing staff, all appropriate contractor personnel involved in the sampling, testing, and quality control including subcontractors, and the engineer or designated representatives.

C.2.3 Personnel

- (1) Perform the quality control sampling, testing, and documentation required under this provision using technicians certified by the department's Highway Technician

Certification Program (HTCP). Have a HTCP Nuclear Density Technician I, or ACT certified technician, perform field density and field moisture content testing.

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

C.2.4 Equipment

- (1) Furnish the necessary equipment and supplies for performing quality control testing. Ensure that all testing equipment conforms to the equipment specifications applicable to the required testing methods. The engineer may inspect the measuring and testing devices to confirm both calibration and condition. Calibrate all testing equipment according to the CMM and maintain a calibration record at the laboratory.
- (2) Furnish nuclear gauges from the department's approved product list at:
<http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/appr-prod/default.aspx>
- (3) Ensure that the nuclear gauge manufacturer or an approved calibration service calibrates the gauge the same calendar year it is used on the project. Retain a copy of the calibration certificate with the gauge.
- (4) For all target density methods, conform to ASTM D 6938 and CMM 8.15 for wet density testing and gauge monitoring methods.
- (5) For the specified target density determined using method C.1(3).1, compute the dry densities for the compacted dense graded base, composed of $\leq 20\%$ RAP or RCA, according to ASTM D 6938.
- (6) For contractor elected target density method C.1(3).2.a compute dry densities of dense graded base composed of $>20\%$ RAP or RCA using a moisture correction factor and the nuclear wet density value. Determine the moisture correction value, for each Proctor produced under the requirements of C.2.5, using the moisture bias as shown in CMM 8.15.12.1 and 8.15.12.2, except the one-point Proctor tests of the 5 random tests is not required. Conduct a moisture bias test for every 9000 tons of Base Aggregate Dense 1 $\frac{1}{4}$ -Inch placed. Determine natural moistures in the laboratory.
- (7) Perform nuclear gauge measurements using gamma radiation in the backscatter or direct transmission position on the same date of placement of the Base Aggregate Dense 1 $\frac{1}{4}$ -Inch material. Backscatter may be used only if the material being tested cannot reliably maintain an undistorted direct transmission test hole. Direct transmission tests must be performed at the greatest possible probe depth of 2 inches, 4 inches, or 6 inches, but not to exceed the depth of the compacted layer being tested. Perform each test for 4 minutes of nuclear gauge count time.

C.2.5 Contractor Testing

- (1) Perform compaction testing on the mainline dense graded base material, as defined by A.(4). Perform the quality control sampling, testing, and documentation required under this provision using HTCP certified technicians as required in C.2.3. Conform to CMM 8.15 for testing and gauge monitoring methods.
- (2) Select test sites randomly using ASTM Method D3665. Do not test less than 1 ½ feet from the unsupported edge of the dense graded base layer. Test sites must be located within the mainline traveled way or the traveled way's adjacent mainline shoulder.

C.2.5.1 Contractor Required Quality Control (QC) Testing

- (1) Conduct testing at a minimum frequency of one test per lot. A lot will consist of each 1500 tons for each layer with a minimum lift thickness of 2" of Base Aggregate Dense 1 1/4-Inch material placed, regardless of the location of placement. Each lot of in-place mainline, as defined by A.(4), Base Aggregate Dense 1 1/4- Inch material compacted will be accepted when the lot field density meets the required minimum 93.0% of target density. Lots that don't achieve 93.0% of target density must be addressed and approved according to C.2.7.
- (2) Notify the engineer, if a lot field density test falls below the required minimum value. Document and perform corrective actions according to C.2.7. Deliver documentation of all compaction testing results to the engineer at the time of testing.

C.2.5.1.1 Target Density Determination

C.2.5.1.1.1 Density Control Strip Method

- (1) For contractor elected target density method C.1(3).2.c, construct a control strip for each layer of placement to identify the target wet density for the base aggregate dense material. The control strip construction and density testing will occur under the direct observation and/or assistance of the department QV personnel.
- (2) Unless the engineer approves otherwise, construct control strips to a minimum dimension of 300 feet long and one full lane width.
- (3) Completed control strips may remain in-place to be incorporated into the final roadway cross-section.
- (4) Construct additional control strips, at a minimum, when:
 1. The four point moving average gradation on any one sieve differs from the original gradation test result for that sieve by more than 10 percentage points. The original gradation test is defined as the gradation of the material used to construct the control strip. A previously determined Proctor value will remain valid for any material with gradation for all sieves within 10.0 percentage points of that Proctor's original gradation test.
 2. The source of base aggregate changes.

3. The four point moving average percentage of blended recycled materials, from classification of material retained on the No. 4 sieve in the original gradation test, differs by more than 10 percentage points. The original gradation test is defined as the gradation of the material used to construct the control strip. A previously determined Proctor value will remain valid for any material with gradation for all sieves within 10.0 percentage points of that Proctor's original gradation test.
 4. The layer thickness changes more than 2.0 inches.
 5. The percent target density exceeds 103.0% on two consecutive density measurements.
- (5) Construct control strips using equipment and methods representative of the operations to be used to place and compact the remaining 1 1/4-Inch Base Aggregate Dense material. Wet the base, as mutually agreed upon by the contractor and engineer, to obtain and/or maintain adequate moisture content to ensure proper compaction. Discontinue water placement if the base begins to exhibit signs of saturation or instability.
 - (6) After compacting the control strip with a minimum of 2 passes, mark and take density measurements at 3 random locations, at least 1 1/2 feet from the edge of the base. Subsequent density measurements will be taken at the same 3 locations.
 - (7) After each subsequent pass of compaction equipment over the entirety of the control strip, take density measurements at the 3 marked locations. Continue compacting and testing until the increase in density measurements is less than 2.0 lb/ft³, or the density measurements begin to decrease.
 - (8) Upon completion of control strip compaction, take 10 randomly located density measurements within the limits of the control strip, at least 1 1/2 feet from the edge of the base. The final measurements recorded at the 3 locations under article C.2.4.1.1.1(6) may be included as 3 of the 10 measurements. Average the ten measurements to obtain the control strip target density and target moisture for use in contractor elected method C.1(3).2.c.

C.2.5.1.1.2 Maximum Wet and/or Dry Density Methods

- (1) For contractor elected target density methods C.1(3).2.a, C.1(3).2.b, and contractually specified target density method C.1(3).1; perform one gradation and 5-point Proctor test before placement of 1 1/4-Inch dense graded base. Perform additional gradations every 3000 tons. If sampling requirements are identical, samples/testing performed for the QMP Base Aggregate specification may be used to fulfill the gradation testing requirements of this specification.

- (2) Perform additional 5-point Proctor tests, at a minimum, when:
1. The four point moving average gradation on any one sieve differs from the original gradation test result for that sieve, by more than 10 percentage points. The original gradation test is defined as the gradation of the material used to create a 5-point Proctor. Each 5-point Proctor test will remain valid for any material with gradation for all sieves within 10.0 percentage points of that Proctor's original gradation test.
 2. The source of base aggregate changes.
 3. The four point moving average percentage of blended recycled materials ; from classification of material retained on the No. 4 sieve; in the original gradation test, differs by more than 10 percentage points. The original gradation test is defined as the gradation of the material used to construct the control strip. A previously determined Proctor value will remain valid for any material with gradation for all sieves within 10.0 percentage points of that Proctor's original gradation test
 4. Percent target density exceeds 103.0% on two consecutive density tests.
- (3) Provide Proctor test results to the engineer within 48 hours of sampling. Provide gradation test results to the engineer within 24 hours of sampling.
- (4) Split each contractor QC Proctor sample and identify it according to CMM 8.30. Deliver the split to the engineer within one business day for department QV Proctor testing.
- (5) Split each non-Proctor 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.

C.2.5.2 Optional Contractor Assurance (CA) Testing

- (1) CA Testing is optional and is conducted to further validate QC testing. The contractor may submit recorded CA data to provide additional information for the following:
1. Process control decisions
 2. Troubleshooting possible sampling, splitting, or equipment problems.

C.2.6 Department Testing

C.2.6.1 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 two business days after the department obtains the sample.

C.2.6.2 Quality Verification (QV) Testing

- (1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in C.2.3 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.
- (2) The department will conduct QV tests at the minimum frequency of 30% of the required gradation, density and Proctor contractor tests.
- (3) The department will utilize contractor's QC Proctor results for determination of the material target density. The department will verify QC Proctor values by testing QC Proctor split sample. The department will use QC Proctor value as a target density if the QC and QV Proctor test results meet the tolerance requirements specified in section 2.6.2.(7).
- (4) The department will locate gradation and nuclear density test samples, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will split each QV sample, test half for QV, and retain the remaining half for 7 calendar days.
- (5) 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.
- (6) The department will utilize control strip target density testing results in lieu of QV Proctor sampling and testing when the contractor elected C.1 (3).2.c target density method is used.
- (7) The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to this special provision, the department will take no further action. If QV test results are nonconforming, take corrective actions according to C.2.7 until the requirements of this special provision are met. Differing QC and QV nuclear density values of more than 2.0 pcf will be investigated and resolved. Differing QC and QV Proctor values of more than 3.0 pcf will be investigated and resolved.

C.2.6.3 Independent Assurance (IA)

- (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. 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 C.2.6.4.

C.2.6.4 Dispute Resolution

- (1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor shall review the data, examine data reduction and analysis methods, evaluate sampling and testing methods/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 project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product or work, the department will use third party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent laboratory. The department may use third party test results to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

C.2.7 Corrective Action

- (1) Lots not achieving 93.0% of target density may be addressed and accepted for compaction according to the requirements of this section. Unless otherwise stated, the actions taken to address an unacceptable lot must be applied to the entire lot.

Passing CA test results according to section C.2.5.2 will reduce the limits of lot investigations and/or corrective actions.

- (2) At no additional cost to the department, investigate the moisture content of material in an unacceptable lot. Moisture content testing/samples collected under the QC and/or QV testing articles of this specification may be used to complete this investigation. Obtain moisture content readings according to ASTM D 6938. For material composed of >20% RAP or RCA, correct the moisture content with the moisture correction value

using the moisture bias, as shown in CMM 8.15.12.1 and 8.15.12.2, except the one-point Proctor tests of the 5 random tests is not required.

- (3) Lots with moisture contents within 2.0 percentage points of optimum moisture for target density methods C.1(3).1, C.1(3).2.a, or C.1(3).2.b, or within 2.0 percentage points of the target moisture content for target density method C.1(3).2.c, and exhibiting no signs of deflection when subjected to loading by the heaviest roller used in the placement and compaction operations, shall be, at no additional cost to the department, compacted a minimum of one more pass using equipment and methods representative of the operations used to place and compact the Base Aggregate Dense 1 1/4-Inch, and density tested at the same location (station and offset) as the failing QC and/or QV density tests. If the change in density exceeds 2.0 lb/ft³ continue subsequent compactive efforts and density testing on that lot, at no additional cost to the department. If the change in density is less than or equal to 2.0 lb/ft³, the lot is accepted as satisfying the compaction requirements of this provision.
- (4) Lots with moisture contents within 2.0 percentage points of optimum moisture for target density methods C.1 (3).1, C.1 (3).2.a, or C.1 (3).2.b, or within 2.0 percentage points of the target moisture content for target density method C.1 (3).2.c, and exhibiting signs of deflection when subjected to loading by the heaviest roller used in the placement and compaction operations, will be reviewed by the engineer. The engineer may request subgrade improvement methods, such as excavation below subgrade (EBS), installation of geotextile fabrics, installation of breaker run material or others to be completed and paid for as specified in standard spec 301.5, or may request, at no additional cost to the department, an additional pass of compactive effort using equipment and methods representative of the operations used to place and compact the base aggregate dense and density test.
 - 1. If, after an additional pass, the change in density at the same location (station and offset) as the failing QC and/or QV density tests exceeds 2.0 lb/ft³ in a lot continue subsequent compactive efforts and density testing on that lot, at no additional cost to the department. If the change in density at the same location (station and offset) as the failing QC and/or QV density tests is less than or equal to 2.0 lb/ft³, and subgrade improvement methods are not requested by the engineer, the lot is accepted as satisfying the compaction requirements of this provision.
 - 2. If subgrade improvement methods are requested by the engineer, upon completion, including compaction of the restored base material, conduct a density test within the improved subgrade limits. This density test result will replace the prior field density value. If the lot field density equals or exceeds 93.0% of target density the lot is accepted as satisfying the compaction requirements of this provision. If the lot field density fails to achieve 93.0% of target density, at no additional cost to the department, compact the lot a minimum of one more pass using equipment and methods representative of the operations used to place and compact the base aggregate dense; and density test at the same

location (station and offset) as the failing QC and/or QV density tests. If the change in density exceeds 2.0 lb/ft³ continue subsequent compactive efforts and density testing on that lot, at no additional cost to the department. If the change in density is less than or equal to 2.0 lb/ft³, the lot is accepted as satisfying the compaction requirements of this provision.

- (5) Unacceptable lots, with moisture contents in excess of 2.0 percentage points above or below optimum moisture for target density methods C.1(3).1, C.1(3).2.a, or C.1(3).2.b ; or in excess of 2.0 percentage points above or below the target moisture content for target density method C.1(3).2.c; shall receive contractor performed and documented corrective action; including additional density testing; at no additional cost to the department.
- (6) Density tests completed subsequent to any corrective action will replace previous field density test results for that lot. Continue corrective actions until 93.0% of target density is achieved or an alternate compaction acceptance criteria is met according to this section.
- (7) Field moisture contents of materials tested using contractor elected target density methods C.1(3).2.b or C.1(3).2.c cannot exceed 2.0 percentage points of the optimum moisture content or 2.0 percentage points of the target moisture content, respectively. Density tests on materials using contractor elected target density methods C.1(3).2.b or C.1(3).2.c will not be considered for lot compaction acceptance until the moisture content of the corresponding density test of the in-place material is less than 2.0 percentage points above of the optimum moisture content or 2.0 percentage points of the target moisture content, respectively.

D Measurement

- (1) The department will measure QMP Base Aggregate Dense 1 1/4-Inch Compaction by the ton, acceptably completed. The measured tons of QMP Base Aggregate Dense 1 1/4-Inch Compaction equals the tons of Base Aggregate Dense 1 1/4-Inch acceptably completed, regardless of placement location and density testing eligibility.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
371.1000.S	QMP Base Aggregate Dense 1 1/4-Inch Compaction	TON
- (2) Payment is full compensation for performing compaction testing; for sampling and laboratory testing; and for developing, completing, and documenting the compaction quality management program. The department will pay separately for providing the aggregate under the Base Aggregate Dense 1 1/4-Inch bid item.

370-010 (20151210)

25. Concrete Pavement Fast Track, 8-Inch, Item 415.1150.S.01.

A Description

This special provision describes construction of fast track concrete pavement according to the standard specifications, as shown on the plans, and as hereinafter provided. Concrete Pavement Fast Track, 8-Inch is to be used for Stage 1 construction only, unless directed by the engineer in the field.

B Materials

B.1 Concrete Mixtures

Concrete mix design shall be the responsibility of the contractor. Delete standard spec 501.2.5.4.4 and standard spec 501.3.2.3. Chloride based accelerators shall be prohibited from use in fast track concrete pavement. Any chemical admixture(s) to be used, other than air-entraining agents or water reducers from the department's approved list, must be approved in advance by the engineer. The water-cement ratio of the concrete mixture shall not exceed 0.40.

C Construction

C.1 Opening to Traffic

Delete standard spec 415.3.15 and replace with the following:

Fast track concrete pavement must attain a minimum compressive strength of 3500 psi before it can be opened to traffic. The compressive strength shall be measured by testing concrete cylinders cured in the field on top of the slab, under the curing blanket.

At least two cylinders shall be tested in determining the attained strength of fast track concrete pavement for the purpose of opening the pavement to traffic. The average of test results for the two cylinders shall be used to determine compliance, except that neither cylinder may be less than 10 percent below the required strength.

If opening is not controlled by cylinders, cores may be substituted.

C.2 Test Equipment

In the field laboratory, provide a compressive test machine for use by department staff, and all equipment and materials necessary to perform compressive testing. The compressive test machine shall be an electrically powered unit with a minimum capacity of 200,000 lbs, and shall meet all requirements of ASTM C39. After the machine is set in place in the field laboratory on the project, provide calibration by a qualified vendor according to all requirements of ASTM E4. This vendor shall provide the engineer with a Certificate of Calibration. Recalibration shall be required under any of the conditions covered in section 5.1.1 of ASTM C39. The contractor will be allowed access to the field laboratory to use the machine for preliminary mix design testing for fast track concrete.

C.3 Concrete Mix Approval Procedure

The following activities shall be completed in advance of the paving date.

1. Perform preliminary laboratory and/or field trial batching to establish the mix proportions necessary to meet the anticipated necessary age-strength properties.
2. Submit an action plan to the engineer for the specified closure period, which shall include the amount of time to be allowed for concrete curing at the conclusion of paving. Also submit to the engineer, at the same time, a proposed mix design (including specific sources and/or trade names as applicable for all materials) for formal mix design acceptance testing using a full scale field trial batch.
3. Execution of the formal full-scale field trial batch for mix design acceptance shall not commence until the engineer has approved the action plan and all components of the proposed mix design.
4. Under supervision of the engineer, cast a test slab of the same thickness as the actual fast track concrete work required on the project. The test slab shall be cast under similar environmental conditions as the actual fast track concrete work required on the project, subject to the approval of the engineer. The test slab shall consist of at least one full batch from the plant that will provide concrete for the project. Department project staff shall cast test cylinders from this batch, and the cylinders shall be cured laying down on top of the test slab under the same type of insulated blanket that will be used for the project. Department staff shall test these cylinders in pairs as the end of the designated curing time approaches, to determine the curing time required to reach the required 3500 psi compressive strength. If the required strength is not reached within the curing time allowed in the action plan, the contractor shall modify the mix and repeat the mix acceptance test. Once a mix design is accepted, all components and proportions of the mix must remain the same for all fast track concrete work on the project, with the exception of minor adjustments of water and air-entraining agent as necessary, or the mix acceptance test must be repeated.

Trial slabs cast for preliminary or formal testing may be cast offsite, or incorporated in the work in place of standard concrete pavement, subject to approval of the engineer. Any test slabs so incorporated in the work must meet pertinent requirements for standard concrete pavement, and the contractor shall be paid the bid unit price for standard concrete pavement of the same nominal thickness. Any test slabs cast offsite shall become the property of the contractor.

C.4 Curing Blankets

As soon as possible after surface texturing and application of curing compound and without damage to the pavement surface, cover the concrete with impermeable insulating blankets with an R value of at least 0.09. The blankets shall remain in place until the concrete has reached 3500 psi compressive strength. The blankets may be temporarily turned back for the minimum time necessary to facilitate joint sawing.

D Measurement

The department will measure Concrete Pavement Fast Track 8-Inch by area in square yards, completed according to the contract and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
415.1150.S.01	Concrete Pavement Fast Track, 8-Inch	SY

Payment is full compensation for furnishing and calibrating test equipment; developing mix designs; placing test slabs and furnishing test slab materials when placed offsite; furnishing, hauling, preparing, placing, curing, and protecting of all materials except pavement ties and dowel bars which are installed in the existing concrete pavement; sawing joints; preparing the foundation; and backfilling.

415-010 (20110615)

26. Protection of Concrete.

Supplement standard spec 415.3.16 as follows:

Provide for a minimum of one concrete finisher to remain on the project site after final finishing of all concrete surfaces until such time as the concrete has hardened sufficiently to resist surface scarring caused by footprints, handprints, or any other type of imprint, malicious or otherwise. Actively and continuously patrol on foot the newly placed concrete and repair any damage to the surface that might be sustained as described above.

The cost for providing the finisher(s), the necessary equipment, and materials is construed to be included in the contract unit price for each concrete item.

27. Concrete Pavement 8 Inch and 8 ½ Inch.

Concrete Pavement 8 Inch and 8 ½ Inch shall conform to standard spec 415 and as follows:

1. Do not tine the concrete pavement. Use an artificial turf drag approved by the engineer to texture the surface.
2. Concrete Pavement 8 Inch and 8 ½ Inch may be placed after November 1 with the approval of the engineer. Comply with Standard spec 415.3.13 for Cold Weather Concreting. The cost of providing covering materials and insulation or other costs incurred with the protection of the pavement is incidental to the pertinent item. No additional payment will be made by the department.

3. Leave a 2 foot by 2 foot “box out” at section corner locations. The section corner monuments will be replaced by SEWRPC. Notify the engineer when the paving is complete so that arrangements can be made to have SEWRPC restore the section corner monuments. After the monument has been restored, place concrete in the “box out”. The cost of this additional concrete is incidental to the item Concrete Pavement 8 Inch and 8 ½ Inch. No additional payment will be made.

28. HMA Pavement 4 MT 58-28 H, Item 460.6424.

A Description

This special provision describes providing HMA pavement including the binder under a combined bid item.

Define gradations, traffic levels, and asphaltic binder designation levels as follows:

<u>GRADATIONS</u> (NMAS)		<u>TRAFFIC VOLUME</u>		<u>DESIGNATION LEVEL</u>	
1	37.5 mm	LT	Low	S	Standard
2	25.0 mm	MT	Medium	H	Heavy
3	19.0 mm	HT	High	V	Very Heavy
4	12.5 mm			E	Extremely Heavy
5	9.5 mm				
6	4.75 mm				

Construct HMA pavement of the type the bid item indicates encoded as follows:



Conform to standard spec 460 as modified in this special provision.

B Materials

Replace standard spec table 460-1 with the following to change the footnotes to refer to LT and MT mixes instead of E-0.3 and E-3 mixes:

TABLE 460-1 AGGREGATE GRADATION MASTER RANGE AND VMA REQUIREMENTS

SIEVE	PERCENTS PASSING DESIGNATED SIEVES						
	NOMINAL SIZE						
	37.5 mm (#1)	25.0 mm (#2)	19.0 mm (#3)	12.5 mm (#4)	9.5 mm (#5)	SMA 12.5 mm (#4)	SMA 9.5 mm (#5)
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

SIEVE	PERCENTS PASSING DESIGNATED SIEVES						
	NOMINAL SIZE						
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 LT and MT mixes

^[2] 15.5 for LT and MT mixes

Replace standard spec table 460-2 with the following to switch from E mixes to LT, MT, and HT mixes; and change the tensile strength ratio requirements to 0.75 without antistripping additive and 0.80 with antistripping additive:

TABLE 460-2 MIXTURE REQUIREMENTS

Mixture type	LT	MT	HT	SMA
ESALs x 106 (20 yr design life)	<2.0	2 - <8	>8	> 5 mil
LA Wear (AASHTO T96)				
100 revolutions(max % loss)	13	13	13	13
500 revolutions(max % loss)	50	45	45	40
Soundness (AASHTO T104) (sodium sulfate, max % loss)	12	12	12	12
Freeze/Thaw (AASHTO T103) (specified counties, max % loss)	18	18	18	18
Fractured Faces (ASTM 5821) (one face/2 face, % by count)	65/ —	75 / 60	98 / 90	100/90
Flat and Elongated (ASTM D4791) (max %, by weight)	5 (5:1 ratio)	5 (5:1 ratio)	5 (5:1 ratio)	20 (3:1 ratio)
Fine Aggregate Angularity (AASHTO T304, method A, min)	40	43	45	45
Sand Equivalency (AASHTO T176, min)	40	40	45	50
Gyratory Compaction				
Gyrations for Nini	6	7	8	8
Gyrations for Ndes	40	75	100	65
Gyrations for Nmax	60	115	160	160
Air Voids, %Va (%Gmm Ndes)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)	4.0 (96.0)
% Gmm Nini	<= 91.5 ^[1]	<= 89.0 ^[1]	<= 89.0	—
% Gmm Nmax	<= 98.0	<= 98.0	<= 98.0	—
Dust to Binder Ratio ^[2] (% passing 0.075/Pbe)	0.6 - 1.2	0.6 - 1.2	0.6 - 1.2	1.2 - 2.0

Mixture type	LT	MT	HT	SMA
Voids filled with Binder (VFB or VFA, %)	68 - 80 ^{[4] [5]}	65 – 75 ^{[3] [4]}	65 - 75 ^{[3] [4]}	70 - 80
Tensile Strength Ratio (TSR) (ASTM 4867)				
no antistripping additive	0.75	0.75	0.75	0.75
with antistripping additive	0.80	0.80	0.80	0.80
Draindown at Production Temperature (%)	—	—	—	0.30

^[1] The percent maximum density at initial compaction is only a guideline.

^[2] For a gradation that passes below the boundaries of the caution zone (ref. AASHTO MP3), the dust to binder ratio limits are 0.6 - 1.6.

^[3] For #5 (9.5mm) and #4 (12.5 mm) nominal maximum size mixtures, the specified VFB range is 70 - 76%.

^[4] For #2 (25.0mm) nominal maximum size mixes, the specified VFB lower limit is 67%.

^[5] For #1 (37.5mm) nominal maximum size mixes, the specified VFB lower limit is 67%.

Replace standard spec 460.2.8.2.1.7 paragraph six with the following to base payment adjustment on the combined bid item unit price:

- (6) The department will reduce payment for nonconforming QMP HMA mixtures, starting from the stop point to the point when the running average is back inside the warning limits, as follows:

PAYMENT FOR MIXTURE^{[1] [2]}

ITEM	PRODUCED WITHIN WARNING BANDS	PRODUCED OUTSIDE JMF LIMITS
Gradation	90%	75%
Asphalt Content	85%	75%
Air Voids	70%	50%
VMA	90%	75%

^[1] For projects or plants where the total production of each mixture design requires less than 4 tests refer to CMM 8-36.

^[2] Payment is in percent of the contract unit price for the HMA Pavement bid item. The department will reduce pay based on the nonconforming property with lowest percent pay. The department will administer pay reduction under the Nonconforming QMP HMA Mixture administrative item.

C Construction

Replace standard spec table 460-3 with the following to switch from E mixes to LT, MT, and HT mixes:

TABLE 460-3 MINIMUM REQUIRED DENSITY^[1]

LOCATION	LAYER	PERCENT OF TARGET MAXIMUM DENSITY		
		MIXTURE TYPE		
		LT AND MT	HT	SMA ^[5]
TRAFFIC LANES ^[2]	LOWER	91.5 ^[3]	92.0 ^[4]	_____
	UPPER	91.5	92.0	_____
SIDE ROADS, CROSSOVERS, TURN LANES, and RAMPS	LOWER	91.5 ^[3]	92.0 ^[4]	_____
	UPPER	91.5	92.0	_____
SHOULDERS and APPURTENANCES	LOWER	89.5	89.5	_____
	UPPER	90.5	90.5	_____

^[1] The table values are for average lot density. If any individual density test result falls more than 3.0 percent below the minimum required target maximum density, the engineer may investigate the acceptability of that material.

^[2] Includes parking lanes as determined by the engineer.

^[3] Minimum reduced by 2.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

^[4] Minimum reduced by 1.0 percent for a lower layer constructed directly on crushed aggregate or recycled base courses.

^[5] The minimum required densities for SMA mixtures are determined according to CMM 8-15.

D Measurement

Add the following to standard spec 460.4:

The department will measure HMA Pavement (type) conforming to standard spec 460.4.

E Payment

Add the following to standard spec 460.5 to switch from E mixes to LT, MT, and HT mixes; to combine the pavement and binder bid items; and to specify a pay reduction for pavement placed with nonconforming binder:

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

ITEM NUMBER	DESCRIPTION	UNIT
460.6424	HMA Pavement 4 MT 58-28 H	TON

Payment is full compensation for providing HMA Pavement including asphaltic binder.

In addition to any pay adjustment under standard spec 460.2.8.2.1.7(6), the department will adjust pay for nonconforming binder under the Nonconforming QMP Asphaltic Material administrative item. The department will deduct 25 percent of the contract unit price of the HMA Pavement bid item per ton of pavement placed with nonconforming PG binder the engineer allows to remain in place.

460-025 (20151210)

29. Adjusting Manhole Covers.

Protect and maintain sewer accessibility for the duration of the paving project to all sanitary sewer manholes located within the project limits. This work shall be according to the pertinent provisions of standard spec 611, as shown on the plans, and as hereinafter provided.

Concrete grade rings shall conform to Section 8.39.11 of the Standard Specifications for Sewer and Water Construction in Wisconsin.

Thoroughly clean the mating surface on top of the precast concrete corbel section. Lay precast concrete adjustment rings in a full bed of mortar and completely fill joints.

30. Traffic Control, General.

Install and maintain all traffic control devices throughout the duration of the project. Sufficient quantities have been included for all traffic switches described in the “Prosecution and Progress” and “Traffic” special provisions. Any additional traffic control necessary for additional traffic switches completed for the contractor’s convenience will not be paid for under this contract.

31. Signs Type II Reflective H, Item 637.2210.

Replace any reference to type H sheeting in the sign plates included with the plan with type SH sheeting.

Replace standard spec 637.2.4.2.1 (1) with the following:

Furnish components to attach signs to ground mounted steel posts, traffic signal posts and light poles that are stainless steel with the exception of nylon washers as required by any applicable details in the plans and in the requirements of standard spec 637.3.3.3.

Replace standard spec 637.3.2.8.1 (1) with the following:

Provide type II signs of the size and shape the plans show. All signs are to be fabricated using sheet aluminum and conform to the requirements of standard spec 637.2.1.3.

32. Removing Signs Type II, Item 638.2602.

Replace standard spec 638.3.4 (2) and (3) with the following:

All signs that are removed become the property of Milwaukee County and will be stockpiled at a location designated by the engineer. Cost of this work is be incidental to the bid item Removing Signs Type II. The engineer will contact Milwaukee County Highway Maintenance, Greg Heisel, and (414) 257-6566, to arrange for pickup of salvaged materials. Do not damage salvaged materials.

33. Removing Small Sign Supports, Item 638.3000.

Replace standard spec 638.3.5 (2) with the following:

All small sign supports that are removed become the property of Milwaukee County. Stockpile removed sign supports at a location designated by the engineer. Cost of this work is incidental to the bid item Removing Small Sign Supports. The engineer will contact Milwaukee County Highway Maintenance, Greg Heisel, (414) 257-6566, to arrange for pickup of salvaged materials. Do not damage salvaged materials. Remove unused concrete footings as specified in standard spec 638.3.9, Restore the Site.

34. Temporary Pedestrian Surface Plywood, Item 644.1420.S.

A Description

This special provision describes providing, maintaining, and removing temporary pedestrian surface.

B Materials

Furnish 1 1/4-inch dense graded aggregate conforming to standard spec 305.2.

Furnish: Pressure treated 2x4 framing lumber, pressure treated 3/4-inch plywood with skid resistant surface coating, and weather resistant deck screws 3-1/2-inch minimum for framing and 1-5/8-inch minimum for plywood.

C Construction

Place, compact, and level a dense graded aggregate foundation before placing the surface.

Provide a firm, stable, and slip-resistant surface layer with vertical joints no higher than 1/4 inch and horizontal joints no wider than 1/2 inch. Sheet materials up to 1 inch thick may be lapped if the edge is beveled at 45 degrees or flatter. Asphalt may also be used to ramp up to materials up to 1 inch thick. Construct conforming to the following:

Framed plywood panels 4 feet wide with a skid resistant surface coating.

Align parallel to the existing roadway grade or, if outside of a street or highway right-of-way, do not exceed 5 percent longitudinal slope. Provide cross slope of 1 to 2 percent unless the engineer approves a steeper cross slope in writing.

Maintain the surface with a 4-foot minimum clear width and the specified joint and slope requirements. Repair or reconstruct installations disturbed during construction operations. Remove and dispose of as specified in standard spec 203.3.4 when no longer required.

D Measurement

The department will measure temporary pedestrian surface 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
644.1420.S	Temporary Pedestrian Surface Plywood	SF

Payment is full compensation for providing, maintaining, and removing temporary pedestrian surface.

644-010 (20150630)

35. Temporary Curb Ramp, Item 644.1601.S.**A Description**

This special provision describes providing, maintaining, and removing temporary curb ramps.

B Materials

Furnish materials as follows:

- Asphaltic surface conforming to standard spec 465.2.
- Engineer-approved ready mixed concrete or ancillary concrete conforming to standard spec 602.2 except no QMP is required.
- Commercially available prefabricated curb ramps conforming to Americans with Disabilities Act Accessibility Guidelines.

Furnish yellow detectable warning fields conforming to Americans with Disabilities Act Accessibility Guidelines. Use either an engineer-approved surface-applied type or cast iron from the department's approved products list.

C Construction

Provide and maintain temporary curb ramps, including detectable warning fields, throughout the project duration. Place and compact a dense graded aggregate foundation before placing the curb ramp, unless the curb ramp is to be placed on existing roadway surface.

Remove and dispose temporary curb ramps and associated detectable warning fields when no longer required.

D Measurement

The department will measure temporary curb ramps by each individual ramp, 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
644.1601.S	Temporary Curb Ramp	Each

Payment is full compensation for providing, maintaining, and removing temporary curb ramps.

644-020 (20150630)

36. Temporary Pedestrian Safety Fence, Item 644.1616.S.

A Description

This special provision describes providing, maintaining, and removing the temporary pedestrian safety fence.

B Materials

Furnish notched metal “T” or “U” shaped fence posts weighing 1 1/3 pounds per foot or more.

Furnish select 2x4 dimensional lumber.

Furnish fence fabric meeting the following requirements.

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

The engineer may allow prefabricated fencing systems conforming to Americans with Disabilities Act Accessibility Guidelines.

C Construction

Provide a continuous safety fence with the top edge free of sharp or rough edges.

Repair or reconstruct installations disturbed during construction operations. Remove and dispose of as specified in standard spec 204.3 when no longer required.

D Measurement

The department will measure Temporary Pedestrian Safety Fence 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
644.1616.S	Temporary Pedestrian Safety Fence	LF

Payment is full compensation for providing, maintaining, and removing the temporary pedestrian safety fence.

644-025 (20150630)

37. Backfill Slurry, Item SPV.0035.01.

A Description

This work consists of furnishing and placing Backfill Slurry composed of aggregate, cement and water as directed by the engineer and according to the pertinent requirements of standard spec 209 except as hereinafter modified.

B Materials

The aggregate shall comply with the proportions and gradations for aggregates for Grade A Concrete Masonry according to Standard spec 501. Weigh the aggregates at a batch plant suitable for batching concrete masonry. Mix and deliver the aggregates to the project site in a truck mixer with sufficient water to enable the mixture to flow readily.

The Backfill Slurry material will be accepted on the basis of inspection and approval of the engineer.

C Construction

Discharge the mixture from the truck mixer in a manner to prevent voids or segregation. Immediately remove foreign material which falls into the excavated area to be backfilled prior to or during the placement of the Backfill Slurry. The excavation may be completely filled in a single operation. No further consolidation or compaction effort will be required. Do not pave over the backfill for a minimum of twelve hours.

D Measurement

The department will measure Backfill Slurry by the cubic yard in the truck mixer, based on batch weights, prior to the addition of mixing water. Only material deposited as backfill on the project will be 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.0035.01	Backfill Slurry	CY

Payment is full compensation for furnishing and mixing materials, for hauling and placing.

38. Inlet Covers Type 57, Item SPV.0060.01.

A Description

This special provision describes furnishing and installing a heavy duty cast iron frame and grate at the locations designated and according to standard spec 611 and the details shown on the plans.

B Materials

Furnish all materials according to the pertinent requirements of standard spec 611.2.

C (Vacant)**D Measurement**

The department will measure Inlet Covers Type 57, by the unit in place, furnished, installed, and acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Inlet Covers Type 57	Each

Payment is full compensation for furnishing and installing the inlet covers.

39. Manhole Covers Type 58A, Item SPV.0060.02.**A Description**

This special provision describes furnishing and installing a heavy duty cast iron frame and grate at the locations designated and according to standard spec 611 and the details shown on the plans.

B Materials

Furnish all materials according to the pertinent requirements of standard spec 611.2.

C (Vacant)**D Measurement**

The department will measure Manhole Covers Type 58A by each unit, installed and acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Manhole Covers Type 58A	Each

Payment is full compensation for furnishing and installing the inlet covers.

40. Internal Sanitary Manhole Seal, Item SPV.0060.03.**A Description**

This special provision describes furnishing and installing internal sanitary manhole chimney seals.

B Materials

Furnish an internal manhole seal, such as supplied by Cretex Specialty Products of Waukesha, or MMSD approved equal.

C Construction

Field measure the inside diameter of the manhole frame and the manhole chimney and determine as to whether the inside face of the frame is vertical or tapered in order to obtain the proper size and shape rubber seal.

The surface against which the sleeve is to be compressed must be circular, clean, reasonably smooth and free of any loose material and excessive voids. Any flaws in these surfaces must be repaired with the approved low-shrink mortar and ground smooth. Apply a bead of butyl rubber caulk conforming to ASSHTO M-198 Type B to the lower sealing surface of sleeve.

Install the seal according to the manufacturer's instructions.

D Measurement

The department will measure Internal Sanitary Manhole Seals by each unit, installed and acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Internal Sanitary Manhole Seal	Each

Payment is full compensation for furnishing and installing seal to manufacturer's specifications.

41. Adjusting Water Valve Boxes, Item SPV.0060.04.**A Description**

This special provision describes adjusting, protecting, and maintaining accessibility, for the duration of the paving project, to all City of Milwaukee water service boxes, water gate valve boxes and water manhole frames and lids located within the project limits.

B Materials

All material for the adjustment of these facilities must meet City of Milwaukee specifications and will be provided by the City of Milwaukee by contacting Jesse Hernandez, Milwaukee Water Works, at (414) 708-2670 (or Dave Goldapp, Milwaukee Water Works at (414) 286-6301). If there is contractor damage, the materials must still be provided by the City of Milwaukee, however, in this case, the contractor will be charged for all materials. Deliver materials furnished by the City of Milwaukee and not used on the project to DPW Field Headquarters – Infrastructure, Operations, Water Works at 3850 N. 35th St.

C Construction

Adjust all water service boxes, water gate valve boxes and water manhole frames and lids within the project limits to proposed elevations by the contractor using materials meeting City of Milwaukee specifications.

The City of Milwaukee will locate, mark, inspect and repair all water service boxes within the limits of the project prior to commencement of work on the project.

Throughout the duration of the project, the contractor must ensure that all water service boxes, water gate valve boxes, and water manholes are adequately located and identified by blue paint, and that at all times, all water appurtenances remain accessible for operation by City of Milwaukee forces. Exercise caution working adjacent to water facilities to avoid damage and ensure accessibility.

Upon completion of the contract, the City of Milwaukee will inspect all water facilities to ensure the water boxes and manholes are clean, properly aligned, and accessible. The contractor shall be responsible to make identified repairs and adjustments, and if any repairs or adjustments are made by the City of Milwaukee, the cost will be charged to the contractor.

D Measurement

The department will measure Adjusting Water Valve Boxes as each individual unit acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.04	Adjusting Water Valve Boxes	Each

Payment is full compensation for furnishing all excavation, backfilling, disposal of surplus materials, water box, and restoration of the work site.

42. Adjusting TES Manhole Cover, Item SPV.0060.05.

A Description

This special provision describes adjusting the existing chimney of the block, precast, or brick round manholes; furnishing, installing and removing protection of the cables in the manhole during adjustment operations. Perform work according to the standard specifications, the provisions of the article Adjusting Manhole Covers, as shown on the plans, and as hereinafter specified.

B Material

Furnish and install materials that conform to the requirements of standard spec 519. Salvage and reinstall existing covers on the manholes. The City of Milwaukee will supply covers if designated for replacement. Contact Ricardo Lopez, Inventory Clerk at

(414) 286-6123 prior to obtaining the frames and lids from the DPW Field Headquarters at 3850 N. 35th St. Contractor must have the “Castings Requisitions Form” which will be supplied by the City of Milwaukee at the Preconstruction Meeting to obtain the covers.

C Construction

Report any pre-existing problems to Ms. Karen Rogney of Underground Conduit at (414) 286-3243 three working days in advance of any construction on manholes. If additional frames and lids are required, Ms. Rogney will authorize a “Castings Requisitions Form”.

Break out and remove pavement around manhole. Remove existing covers and store and secure them properly. Replace any damaged, lost, or stolen covers at the contractor’s expense.

Adjust manhole cover to proposed grade using bricks or concrete rings as necessary. Remove wedges/shims. Fill voids with grout. Do not back plaster inside walls.

Notify Ms. Rogney three working days in advance of completion of each manhole adjustment, for inspection and acceptance of work performed. The contractor will receive no payment until the above work is approved by Underground Conduit.

D Measurement

The department will measure Adjusting TES Manhole Cover 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.0060.05	Adjusting TES Manhole Cover	Each

Payment is full compensation for furnishing all required materials, exclusive of frames, grates, or lids available and designated for adjusting; for removing, reinstalling and adjusting the covers. Covers to be adjusted and which are rendered unfit for use by the contractor through the contractor’s operations will be replaced by the contractor in kind at the contractor’s own cost and expense.

43. Cleaning Drainage Structures, Item SPV.0060.06.

A Description

This special provision describes cleaning drainage structures and the pipes attached to the structures where shown on the plans and as directed by the engineer.

B (Vacant)

C Construction

Completely remove all solids removed from the clogged sewers from the sewer system and haul them off the project for disposal. Silts resulting from any flushing or jetting operation must be prevented from escaping into sewers or waterways. Inspect the drainage structure for repair work and reinstall cover.

D Measurement

The department will measure Cleaning Drainage Structures by each unit of completed and accepted 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.0060.06	Cleaning Drainage Structures	Each

Payment is full compensation for furnishing all materials to clean out drainage including silt and solid retention for removing and devices; for removing and properly disposing materials; paying all associated fees for permits, licenses or disposal of materials.

44. Removing Landmark Reference Monument, Item SPV.0060.07.

A Description

This special provision describes removing existing landmark reference monument.

B (Vacant)

C Construction

Remove **1** U.S.P.LS existing monument during construction operations. The monument is located at section corner of W. Mill Rd. at the intersection of N. 43rd St. (Station 10+00.00), as shown on plans.

The existing monument is a standard SEWRPC concrete monument with brass cap which should be at or near the surface of the existing pavement and is approximately 6-inch square at the top, 36-inches long and 9-inches square on the bottom. The Southeastern Regional Planning Commission (SEWRPC) will tie off existing monuments prior to construction and replace/reset the monuments near the end of construction.

If any of the monument locations fall in an area of CONCRETE pavement, a two-foot by two-foot square will need to be boxed out, during the pouring effort to accommodate the reinstallation of the monument. SEWRPC would provide the contractor with a point marking the center of the box at the appropriate time. When monument is reset SEWRPC will backfill the boxed area to the bottom of the concrete pavement and the contractor would need to fill the remainder of the hole with concrete.

It takes on average approximately 2 hours to install a new monument, and up to 4 hours, worst case condition.

Notify John Washburn of SEWRPC at (262) 547-6721 Ext. 295 (office) or (414) 218-2866 (mobile) or email (jwashburn@sewrpc.org) at least three weeks prior to removal of the existing monument and at least one week prior to placing the pavement. SEWRPC will coordinate with the contractor in placing the new monument.

D Measurement

The department will measure Removing Landmark Reference Monument by each unit of completed and accepted 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.0060.07	Removing Landmark Reference Monument	Each

Payment is full compensation for furnishing all excavating, and removing landmark reference monuments, box-outs, filling box-outs with concrete.

45. Utility Line Opening (ULO), Item SPV.0060.08.

A Description

This special provision describes excavating to uncover utilities for the purpose of determining elevation and potential conflicts 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 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. Give the engineer a minimum of three working days once utility line opening information is received to review all relevant design information prior to proposed utility construction. Where utilities are within 6 feet of each other at a potential conflict location, only one utility line opening will be called for. In these cases, a single utility line opening will be considered full payment to locate multiple utilities. Utility line openings include a trench up to 10 feet long as measured at the trench bottom, and of any depth required to locate the intended utility.

Approve and coordinate all utility line openings with the engineer. Notify the utility field engineers or their agents of this work a minimum of three days prior to the work so they may be present when the work is completed.

Replace pavement over utility line opening trenches which are within the staged traffic area as directed by the engineer. Replace pavement and open to traffic within 24 hours of the excavation.

D Measurement

The department will measure Utility Line Opening (ULO) by the unit each, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.08	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 are not considered part of or paid for under Utility Line Openings, but are considered separate and measured and paid for separately as removal items. Pavement replacement material, concrete curb, gutter, and sidewalk items will also be considered separate from Utility Line Openings and will be measured and paid for separately.

46. Removing Hydrant, Item SPV.0060.09; Installing Hydrant, Item SPV0060.10.

A Description

This special provision describes removing existing hydrants and installing new hydrants.

A.1 General

Perform work under these items according to the details as shown on the plans and the requirements of the City of Milwaukee Water Main Installation Specifications, dated January 2, 1987 (City Water Main Specifications). Additionally, perform all work according to the "Milwaukee Water Works Standard Plan Notes for Water Main Construction", February 24, 2015. Notes 4, 6, 16, 17, 18 and 21 shall not apply to this project. In case of conflicts between the City Water Main Specifications and the standard specifications or these special provisions, the requirements of the standard specifications and the special provisions shall govern. Contact Ms. Angela Baldwin at (414) 286-2813 to purchase copies of the required documents.

B Materials

B.1 General

The City of Milwaukee will furnish hydrants, valves and fittings required for installation on this project. Contact Mr. Ricardo Lopez, Inventory Manager, at (414) 286-6123 (or Mr. Kevin Gray, Inventory, at (414) 286-0669) for material supplies. Furnish all other

water main materials conforming to the latest version of the City of Milwaukee's Material Specifications. Material specifications can be found at the following website: <http://city.milwaukee.gov/water/business/standardspecs.htm>

All materials will require inspection by the City of Milwaukee. Notify Mr. Karl Rohrbach, (414) 286-8148 or Mr. Steve Brengosz, (414) 708-2808, for materials inspection and the City of Milwaukee's Construction Section, (414) 286-2497, for construction inspection, four working days prior to starting construction.

Return all removed or abandoned hydrants to the DPW Field Headquarters – Infrastructure, Operations, Water Works at 3850 N. 35th Street. Contact Mr. Ben Glatzel at (414) 708-2839 for additional information.

B.2 Valve Box Adapters

Install all valve boxes on gate valves with the use of valve box base adapters as detailed in the Standard Plan Notes Regarding Water Main Construction. Install the adapter in addition to the hardwood blocking.

C Construction

All costs for completing the work required for valve installations on hydrant branches are to be included in the price for the Ductile Iron Hydrant Branch item.

Install fittings as shown on plans, incidental to respective ductile iron hydrant branch item. A list of fittings for each hydrant branch installation is provided on plans.

Unless shown otherwise, backfill all water main excavations with granular backfill as specified in Section 14 of the City of Milwaukee Standard Plan Notes Regarding Water Main Construction.

Consolidate all backfill by mechanical compaction per specification 2.6.14(B) of the Standard Specifications for Sewer and Water Construction in Wisconsin. Per specification, the initial compacted lift shall be 2 feet, and the specification shall be modified to read, "each subsequent compacted lift of material shall be 1 foot". Costs are to be included in the unit price bid for the water main. Settling the trench by flooding the backfill will not be allowed.

D Measurement

The department will measure Removing Hydrant as each individual hydrant, acceptably removed, including all construction parameters and requirements as described in this special provision.

The department will measure Installing Hydrant as each individual hydrant, acceptably installed, including all construction parameters and requirements as described in this special provision.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.09	Removing Hydrant	Each
SPV.0060.10	Installing Hydrant	Each

Payment is full compensation for providing all materials (except hydrants provided by the city) including all fittings, and accessories required; for furnishing all surveying; excavating, for sheeting and shoring; for forming foundation; for laying pipe; for concrete base, buttresses, and anchors; for bulkheading and abandoning existing water mains; for sealing joints and making connections to new or existing facilities; for providing granular backfill material, including bedding material; for backfilling; for removing sheeting and shoring; for cleaning out the site of the work and incidentals necessary to complete the work.

47. Permanent Ditch Check, Item SPV.0060.11.**A Description**

This special provision describes permanent ditch check at locations shown on the plans.

B Materials

Use materials as shown in the detail located within the construction details. The light rip rap shall consist of 4" to 8" stone and shall be included in the unit price.

C Construction

Provide suitable ditch check materials, installed and maintained at locations the plans show or as the engineer directs. Construct temporary ditch checks according to the detail shown within the plans. Place the permanent ditch checks across ditches at locations the plans show or as the engineer directs immediately after shaping the ditches or slopes. Excavate upstream sumps as the engineer directs. Remove sediment deposits when the build-up exceeds approximately 1/2 the permanent ditch check structures volume capacity. The engineer may order the contractor to remove deposits if the engineer determines that sediment deposits exceed 1/2 the permanent ditch check structures volume capacity. Dispose of excess sediment as the engineer directs.

D Measurement

The department will measure Permanent Ditch Check by the unit each, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.11	Permanent Ditch Check	Each

Payment for Permanent Ditch Check is full compensation for providing, protecting, and storing ditch check materials on the project; for installing ditch checks at project completion or as the engineer directs; for repairing and reseeding damaged areas; and for disposing of all surplus and waste material.

48. Electrical Vaults 17x30x18-Inch, Item SPV.0060.12.

A Description

Work under this item shall consist of constructing a communications vault and vault lid according to the details shown on the Plans and as hereinafter provided.

B Materials

The electrical vault and vault lid shall be constructed of polymer concrete material or approved equivalent, and be gray in color.

The electrical vault shall have a minimum design load of 15,000 pounds and shall have a permanently recessed logo that reads "BES". The communications vault and lid shall have two ½-inch x 4-inch pull slots. The lid surface shall have a coefficient of friction of 0.50 according to ASTM C-1028.

Void areas between vault openings and conduit shall be filled with self-curing caulking that will provide a permanent, flexible rubber which is unaffected by sunlight, water, oils, mild acids, and alkali. The caulking shall be mildew resistant and non-flammable. The material shall provide a permanent bond between the conduit entering the vault and the polymer concrete. The caulking shall be gray in color.

C Construction

The Electrical Vault shall be installed according to applicable requirements of standard spec 611 and as hereinafter provided.

A manufacturer approved knockout punch driver shall be used to provide openings in the vaults for conduit. Alternatively, the required openings may be machined at the time of stackable vault fabrication.

Voids between entering conduits and the punch driven openings shall not exceed ½-inch. The void areas shall be caulked from the interior and the exterior of the communications vault. The conduit and caulk shall be allowed to fully cure as per the manufacturer's specifications prior to backfilling.

D Measurement

The department will measure Electrical Vaults (Size) as each individual vault, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.12	Electrical Vaults, 17 x 30 x 18-Inch	Each

Payment is full compensation for furnishing and installing all materials, including stackable vaults, lids, gasketing, bolts, washers, stainless steel mounting hardware, fiber optic cable support assembly, caulking, and coarse aggregate; for furnishing all excavation, backfilling, topsoil, restoration, and disposal of surplus materials.

49. Concrete Bases Type 10 Modified, Item SPV.0060.13.

A Description

This special provision describes constructing a concrete base type 10 modified with a 36-inch diameter for monotube mast arm structures according to standard spec 654 with modifications as shown on the plans, and as hereinafter provided.

B Materials

Replace paragraph (4) of standard spec 654.2 as follows:

Supply templates, anchor rods, nuts, and washers for installation as shown on the plans.

C Construction

Construction of this item shall conform with standard spec 654.

Contact City of Milwaukee sewer engineering 3 working days prior to excavating any concrete bases. Please contact Mr. Bob Brooks at (414) 286-3241 or Ms. Nancy Alvarado at (414) 286-2013 to confirm lateral clearance with sewer facilities.

D Measurement

The department will measure Concrete Bases Type 10 Modified as each individual concrete base, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.13	Concrete Base Type 10 Modified	Each

Payment for the base bid items is full compensation for providing concrete bases; for embedded conduit and electrical components; for anchor bolts, nuts, and washers; for bar steel reinforcement, if required; and for excavating, backfilling, and disposing of surplus materials.

50. Poles Type 9, Item SPV.0060.14; Type 10, Item SPV.0060.15.

A Description

Work under this item consists of furnishing and installing monotube poles.

B Materials

Design support structures conforming to the minimum wall thickness the plan details show and to AASHTO design and fabrication standards for structural supports for highway signs, luminaries, and traffic signals. Use a design life of 50 years. Design to withstand a 3 second gust wind speed of 90 mph (145 km/h). Do not use the methods of Appendix C of those AASHTO standards.

Use category III criteria for 15 to 30-foot arms.

For structures requiring a fatigue analysis, use 45 mph (72 km/h) for truck-induced gusts.

After welding and before zinc coating, clean the exterior surface of each steel pole free of all loose rust and mill scale, dirt, oil or grease, and other foreign substances.

Apply a zinc coating conforming to the process specified for steel sign bridges in standard spec 641.2.8. Ensure that the zinc coating is tight, free from rough areas or slag, and presents a uniform appearance.

After completing manufacturing, clean the exterior surfaces of each pole free of all loose scale, dirt, oil or grease, and other foreign substances.

Provide a reinforced hand hole measuring 4 inches by 6 inches (100 mm by 150 mm) as the plans show. Locate the hand hole 18 inches (450 mm) from the bottom of the pole base to the center of the door.

For the hand hole, include an access cover mounted to the pole by two $\frac{1}{4}$ " -20 x $\frac{3}{4}$ " (m6 x 1.00 x 19 mm) hex-head stainless steel bolts.

Provide a grounding lug complete with mounting hardware, as required, inside the pole as the plans show.

Provide access to the grounding lug from the hand hole. Weld the ground lug directly opposite the hand hole on the inside wall of the pole.

Equip the top of the shaft with a removable, ventilated cap held securely in place by at least three $\frac{1}{4}$ " -20 x $\frac{3}{4}$ " (m6 x 1.00 x 19 mm) hex-head stainless steel set screws.

Ensure that all castings are clean, smooth, and with all details well defined and true to pattern.

Attach base plates firmly to the pole shaft by welding or other approved method.

Include anchor bolts meeting AASHTO standards applicable to the pole type and loading. Provide a mounting template that ensures correct installation of anchor bolts in foundation.

C Construction

Install poles as specified in the plan details and using appropriate contractor-furnished anchor bolts and hardware conforming to standard spec 657.2.2.6. Use the appropriate anchor bolt template to ensure correct installation. Secure pole to anchor assembly and document tensioning procedures conforming to standard spec 657.3.2 and provide completed copies of form DT2321 for each structure to the engineer for inclusion in the permanent record.

After completing erection using normal pole shaft raking techniques, ensure the centerline of the shaft appears vertical.

D Measurement

The department will measure Poles Type 9 and Poles Type 10 as each individual pole, 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.0060.14	Poles Type 9	Each
SPV.0060.15	Poles Type 10	Each

Payment is full compensation for providing and installing poles and for providing grounding lugs, fittings, shims, hardware, and other required components necessary to install the poles.

51. Poles Type 12 Modified, Item SPV.0060.16.

A Description

Work under this item consists of furnishing and installing monotube poles.

B Materials

Design support structures conforming to the minimum wall thickness the plan details show and to AASHTO design and fabrication standards for structural supports for highway signs, luminaries, and traffic signals. Use a design life of 50 years. Design to withstand a three second gust wind speed of 90 mph (145 km/h). Do not use the methods of Appendix C of those AASHTO standards.

Use category II criteria for 35 to 55-foot arms.

For structures requiring a fatigue analysis, use 45 mph (72 km/h) for truck-induced gusts.

After welding and before zinc coating, clean the exterior surface of each steel pole free of all loose rust and mill scale, dirt, oil or grease, and other foreign substances.

Apply a zinc coating conforming to the process specified for steel sign bridges in standard spec 641.2.8. Ensure that the zinc coating is tight, free from rough areas or slag, and presents a uniform appearance.

After completing manufacturing, clean the exterior surfaces of each pole free of all loose scale, dirt, oil or grease, and other foreign substances.

Provide a reinforced hand hole measuring 4 inches by 6 inches (100 mm by 150 mm) as the plans show. Locate the hand hole 18 inches (450 mm) from the bottom of the pole base to the center of the door.

For the hand hole, include an access cover mounted to the pole by two ¼” -20 x ¾” (m6 x 1.00 x 19 mm) hex-head stainless steel bolts.

Provide a grounding lug complete with mounting hardware, as required, inside the pole as the plans show.

Provide access to the grounding lug from the hand hole. Weld the ground lug directly opposite the hand hole on the inside wall of the pole.

Equip the top of the shaft with a removable, ventilated cap held securely in place by at least three ¼” -20 x ¾” (m6 x 1.00 x 19 mm) hex-head stainless steel set screws.

Ensure that all castings are clean, smooth, and with all details well defined and true to pattern.

Attach base plates firmly to the pole shaft by welding or other approved method.

Include anchor bolts meeting AASHTO standards applicable to the pole type and loading. Provide a mounting template that ensures correct installation of anchor bolts in foundation.

C Construction

Install poles as specified in the plan details and using appropriate contractor-furnished anchor bolts and hardware conforming to standard spec 657.2.2.6. Use the appropriate anchor bolt template to ensure correct installation. Secure pole to anchor assembly and document tensioning procedures conforming to standard spec 657.3.2 and provide completed copies of form DT2321 for each structure to the engineer for inclusion in the permanent record.

After completing erection using normal pole shaft raking techniques, ensure the centerline of the shaft appears vertical.

D Measurement

The department will measure Poles Type 12 Modified as each individual pole, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.16	Poles Type 12 Modified	Each

Payment is full compensation for providing and installing poles and for providing grounding lugs, fittings, shims, hardware, and other required components necessary to install the poles.

52. Monotube Arms 25-FT, Item SPV.0060.17; 30-FT, Item SPV.0060.18; 35-FT Modified, Item SPV.0060.19.

A Description

Work under this item consists of furnishing and installing monotube arms.

B Materials

Design support structures conforming to the minimum wall thickness the plan details show and to AASHTO design and fabrication standards for structural supports for highway signs, luminaires, and traffic signals. Use a design life of 50 years. Design to withstand a 3 second gust wind speed of 90 mph (145 km/h). Do not use the methods of appendix C of those AASHTO standards.

Use category III criteria for 15 to 30-foot arms. Use category II criteria for 35 to 55-foot arms.

For structures requiring a fatigue analysis, use 45 mph (72 km/h) for truck-induced gusts.

Base the designs on the completed maximum loading configuration the standard detail drawing shows. Along with the materials list, submit a certificate of compliance certifying that the arms as furnished conform to the above structural performance requirements. Ensure that the certificate of compliance is on the manufacturer's letterhead, signed by an authorized company officer, and notarized. Send a copy of the certificate and a copy of the monotube arm shop drawings to the engineer.

Furnish monotube arms conforming to the following:

1. Consist of zinc coated steel round or oval members.
2. Have a mounting device welded to the pole end of the monotube arm that allows the attachment of the arm to a pole as the plans show.
3. Have stiffeners or gussets if required between the arm tube and the arm mounting device to provide adequate strength to resist side loads.

4. Have a clean, uniform natural finish. No paint or other corrosion preventive maintenance coating is required.

After welding and before zinc coating, clean exterior surfaces of each arm free of all loose rust and mill scale, dirt, oil or grease, and other foreign substances.

Apply zinc coating as specified for sign bridge components in standard spec 641.2.8. Ensure that the zinc coating is tight, free from rough areas or slag, and presents a uniform appearance.

After manufacturing is complete, clean the exterior surfaces of each pole free of all loose scale, dirt, oil, or grease, and other foreign substances.

Provide incidental Cable Traffic Signal 9-14 AWG as required under section C.

C Construction

Install monotube arms as specified in the plan details and using appropriate contractor-furnished hardware conforming to standard spec 657.3.3.2.

Prior to installation of each monotube arm, a 1 1/4-inch hole shall be drilled into the bottom of the arm approximately centered over each driving lane as shown on the plans. Where emergency vehicle pre-emption (EVP) is installed, a separate 1 1/4-inch hole shall be drilled in the bottom of the arm approximately centered over the roadway approach, but a minimum of four feet from the nearest drilled hole.

The contractor shall provide 9-14 AWG traffic signal cable spooled 5 feet outside the arm from each drilled hole in the arm, including the hole for EVP if applicable, to the base of the pole below the hand hole. A separate nylon pull rope shall also be provided for the EVP hole to the base of the pole below the hand hole where applicable.

D Measurement

The department will measure Monotube Arms (Size) as each individual arm, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.17	Monotube Arms 25-FT	Each
SPV.0060.18	Monotube Arms 30-FT	Each
SPV.0060.19	Monotube Arms 35-FT Modified	Each

Payment is full compensation for furnishing and installing all materials, for providing high-strength bolt/nut/washer assemblies and DTI washers including those required for testing, and for providing related mounting hardware, leveling shims, incidental cabling, and other required components.

53. Installing Conduit into Existing Manhole, Item SPV.0060.20.

A Description

This special provision describes locating existing conduit system manholes and installing new conduit into those manholes at the locations shown on the plans. The contractor shall verify existing conduit manhole locations with the City of Milwaukee, and shall maintain any existing conductors, fibers, and conduit paths without interruption or damage. Repair and restoration of all disturbed areas resulting from the work shall be according to the pertinent provisions of the standard specifications, and as hereinafter provided.

B Materials

Conduit, as provided and paid for under other items in this contract. All materials shall conform to the pertinent provisions of the standard specifications unless otherwise noted.

C Construction

Carefully expose the outside of the existing structure without disturbing any existing conduits or cabling.

Drill the appropriate sized hole in a concrete structure or saw and remove full sections of block or bricks from the existing structure for the entering of conduit at a location within the structure that will not disturb the existing cabling and will not hinder the installation of new cabling within the installed conduit. This work may include the removal of the existing abandoned conduit from the structure to allow for the installation of the new conduits as indicated on the plans.

Fill any 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.

Carefully tamp backfill into place.

All disturbed areas shall be repaired and restored in kind.

D Measurement

The department will measure Installing Conduit Into Existing Manhole by each unit, acceptably installed. Up to six conduits entering a structure per entry point into the existing structure will be considered a single unit. Conduits in excess of six, or conduits entering at significantly different entry points into the existing manhole will constitute multiple units.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.20	Installing Conduit Into Existing Manhole	Each

Payment is full compensation for drilling holes; removing blocks; removing bricks; removing abandoned conduit; furnishing and installing all materials, including bricks, and

coarse aggregate; for excavation, bedding and backfilling, including any sand or other required materials; furnishing and placing topsoil, fertilizer, seed, and mulch in disturbed areas; for disposal of surplus materials; for making inspections.

54. 4' Diameter Manhole Type TES, Item SPV.0060.21.

A Description

The work under this item consists of a 4'-0" round manhole for the City of Milwaukee Underground Conduit (CUC) Section at locations shown in the plans, according to standard spec 301, 611 and 501, and as hereinafter provided.

B Materials

Concrete and steel reinforcement shall conform to ASTM specification: C478 (latest edition), except that the single cage circumferential reinforcement in all vertical walls shall consist of lines of #6 steel wire spaced 3" horizontally and lines of #10 steel wire spaced 8" vertically located in the center of the wall.

Two lifting inserts for 1-1/2" diameter lifting eyes shall be cast in the wall of the base and all other riser sections except the top cap section.

Up to four 7/8" diameter galvanized steel 1-11/16" pulling-in eyes shall be cast in the wall of the base section directly across from each duct entrance.

Four 5/8" diameter plastic threaded cable rack bolt inserts shall be cast in the wall of the riser section.

A continuous circumferential Butyl Rubber gasket shall be supplied, to be laid on the wall joint of the base and riser section when manhole is being assembled at job site.

The number of pulling-in eyes and/or cable rack bolt inserts may vary.

Additionally, the size, location, shape and number of duct entrances and/or knock-out area may vary. Unit price of manhole shall not vary for number of openings, pulling-in eyes and/or rack bolt inserts.

The city will supply a frame and lid for the manhole. Contractor shall contact Mr. Ricardo Lopez, Inventory Clerk at (414) 286-6123 prior to obtaining the frame and lid from the DPW Headquarters at 3850 N. 35th St. Contractor must have the "Casting Requisition Form" which shall be supplied by the City of Milwaukee at the Preconstruction Meeting.

For any questions on materials, contact Ms. Karen Roney at (414) 286-3243.

C Construction

4' Diameter Manholes Type TES shall be installed according to standard spec 611.3.

Install the top of the roof deck at a standard depth of 18” below finished grade where possible. A minimum depth of 12” from finished grade to the top of the roof deck must be maintained.

D Measurement

The department will measure 4’ Diameter Manhole Type TES by each individual manhole, 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.0060.21	4’ Diameter Manhole Type TES	Each

Payment is full compensation for furnishing all excavation work and disposal of material; for, furnishing and installing all materials, including bricks, and coarse aggregate, bedding and backfilling, concrete forms, concrete placement, appurtenances, and backfilling.

55. Connect Original Service (C.O.S.), Item SPV.0060.22; Disconnect Service (D.S.), Item SPV.0060.23.

A Description

This special provision describes reconnecting existing services to new water main and disconnecting existing services from existing water main.

A.1 General

Perform work under these items according to the details as shown on the plans and the requirements of the City of Milwaukee Water Main Installation Specifications, dated January 2, 1987 (City of Milwaukee Water Main Specifications). Additionally, perform all work according to the “Milwaukee Water Works Standard Plan Notes for Water Main Construction”, February 24, 2015. Notes 4, 6, 16, 17, 18 and 21 shall not apply to this project. In case of conflicts between the City of Milwaukee Water Main Specifications and the standard specifications or these special provisions, the requirements of the standard specifications and the special provisions shall govern. Contact Ms. Angela Baldwin at (414) 286-2813 to purchase copies of the required documents.

B Materials

B.1 General

The City of Milwaukee will furnish corporation stops and service saddles required for installation on this project. Contact Mr. Ricardo Lopez, Inventory Manager, at (414) 286-6123 (or Mr. Kevin Gray, Inventory, at (414) 286-0669) for material supplies. The Contractor shall furnish all other fittings, adapters, piping and service insulators conforming to the latest version of the City of Milwaukee’s Material Specifications. Material specifications can be found at the following website: <http://city.milwaukee.gov/water/business/standardspecs.htm>

All materials will require inspection by the City of Milwaukee. Notify Mr. Karl Rohrbach, (414) 286-8148 or Mr. Steve Brengosz, (414) 708-2808, for materials inspection and the City of Milwaukee's Construction Section, (414) 286-2497, for construction inspection, four working days prior to starting construction.

C Construction

When required and noted "C.O.S." on the plan(s), the contractor shall remove the service pipe from the old main and connect the service to the new main. The contractor shall furnish and install the copper service piping and fittings required to extend the service from the existing to the new main and make all connections. Contractor shall be responsible for tapping the new water main for the C.O.S.

When required and noted "D.S." on the plan(s), the contractor shall disconnect the service at the main. The contractor shall close the corporation stop, then sever and crimp the existing service pipe. The curb stop box connected to the disconnected service shall be removed and abandoned per Section 5.14.5 of City of Milwaukee Water Main Specifications.

The Milwaukee Water Works will shut off the water main to be altered and provide temporary hose connections to affected services as required.

The contractor will be responsible for all surveying required to layout and locate the water services.

Unless shown otherwise, backfill all water main excavations with granular backfill as specified in Section 14 of the City of Milwaukee Standard Plan Notes Regarding Water Main Construction.

Consolidate all backfill by mechanical compaction per specification 2.6.14(B) of the Standard Specifications for Sewer and Water Construction in Wisconsin. Per specification, the initial compacted lift shall be 2 feet, and the specification shall be modified to read, "each subsequent compacted lift of material shall be 1 foot". Costs are to be included in the unit price bid for the water main. Settling the trench by flooding the backfill will not be allowed.

D Measurement

The department will measure Connect Original Service (C.O.S.) and Disconnect Service (D.S.) as each individual unit, acceptably completed, including all construction parameters and requirements as described in this special provision.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.22	Connect Original Service (C.O.S.)	Each
SPV.0060.23	Disconnect Service (D.S.)	Each

Payment is full compensation for providing all labor, tools, equipment, materials (except those provided by the City of Milwaukee) and accessories required; for all surveying; for all excavating, for sheeting and shoring; for forming foundation; for sealing joints and making connections to new or existing facilities; for providing granular backfill material, including bedding material; for backfilling; for removing sheeting and shoring; for cleaning out the site of the work and incidentals necessary to complete the work.

56. Abandon Water Main 8-Inch, Item SPV.0060.24.

A Description

This special provision describes the abandonment of 8-inch diameter water main as shown on the plans.

A.1 General

Perform work under these items according to the details as shown on the plans and the requirements of the City of Milwaukee of Milwaukee Water Main Installation Specifications, dated January 2, 1987 (City of Milwaukee Water Main Specifications). Additionally, perform all work according to the “Milwaukee Water Works Standard Plan Notes for Water Main Construction”, February 24, 2015. Notes 4, 6, 16, 17, 18 and 21 shall not apply to this project. In case of conflicts between the City of Milwaukee Water Main Specifications and the standard specifications or these special provisions, the requirements of the standard specifications and the special provisions shall govern. Contact Ms. Angela Baldwin at (414) 286-2813 to purchase copies of the required documents.

A.2 Submittals

Address all required submittals to Milwaukee Water Works as follows:

Superintendent
Milwaukee Water Works
Zeidler Municipal Building
841 North Broadway, Room 409
Milwaukee, WI 53202

A.3 Sequence of Construction

Due to the nature of this work, including traffic staging and coordination with other work, the contractor is advised there may be multiple mobilizations to complete the water main work. No additional payment will be made by the department for said mobilizations.

Determine sequence and schedule for water main construction, subject to the requirements herein.

Prepare and submit for review by the Superintendent of Milwaukee Water Works a detailed construction schedule stating the anticipated dates and duration of all interruptions in water service necessary to complete the work under the contract, including the abandonment of existing water mains.

B (Vacant)

C Construction

When required and noted Abandon Water Main on the plan(s), the contractor shall excavate to expose existing water main, cut/remove pipe as needed for abandonment installations, install bulkheads in the open ends of the section of water main to be abandoned and install plug(s) or cap(s), where required, to reactivate the live water main.

The Milwaukee Water Works will shut off the water main to be altered and provide temporary hose connections to affected services as required.

Unless shown otherwise, backfill all water main excavations with granular backfill as specified in Section 14 of the City of Milwaukee Standard Plan Notes Regarding Water Main Construction.

Consolidate all backfill by mechanical compaction per specification 2.6.14(B) of the Standard Specifications for Sewer and Water Construction in Wisconsin. Per specification, the initial compacted lift shall be 2 feet, and the specification shall be modified to read, "each subsequent compacted lift of material shall be 1 foot". Costs are to be included in the unit price bid for the water main. Settling the trench by flooding the backfill will not be allowed.

D Measurement

The department will measure Abandon Water Main 8-Inch as each individual unit, acceptably completed, including all construction parameters and requirements as described in this special provision.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.24	Abandon Water Main 8-Inch	Each

Payment is full compensation for providing all labor, equipment, materials; for furnishing all surveying; excavating, for sheeting and shoring; for bulkheading and abandoning existing water mains; for sealing joints and making connections to new or existing facilities; for providing granular backfill material, including bedding material; for backfilling; for removing sheeting and shoring; for permanent pavement restoration only where noted on plans and this special provision; for cleaning out the site of the work and incidentals necessary to complete the work.

57. Water Main Protection, Item SPV.0060.25.

A Description

This special provision describes protecting existing water mains from newly constructed storm drainage facilities. No structures will be allowed over the existing water main or hydrant branch with less than 18" of vertical out-to-out clearance. Alternate drainage

structures shall be used to provide minimum sewer-water clearances required by Wisconsin DNR.

B Materials

Furnish and install materials as detailed on the construction plans.

C Construction

Construct drainage structure, located above and across an existing water main, by utilizing materials and joints that are water tight. For all catch basins and inlets that have less than 24" out-to-out of horizontal clearance the make the following protections:

- 1) Alter the catch basins and inlets to provide 18" of vertical clearance to the water mains or hydrant branches.
- 2) Wrap the catch basins and inlets with 2 layers of 8 mil polyethylene around the base and extending 1ft vertically on all sides of the drainage structure.

D Measurement

The department will measure Water Main Protection as each individual water main protection, 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.0060.25	Water Main Protection	Each

Payment is full compensation for protecting existing water mains; and for furnishing all excavation, backfilling, disposal of surplus materials, restoration of the work site.

58. Pavement Marking Grooved Epoxy 4-Inch, Item SPV.0090.01; 8-Inch, Item SPV.0090.02.

A Description

This special provision describes furnishing, grooving, and installing wet reflective epoxy pavement marking as shown on the plans, according to standard spec 646, and as hereinafter provided. This special provision also describes ensuring that temporary pavement marking is placed in the same location as the final marking on new lanes that are not grooved and open to traffic.

B Materials

Furnish epoxy paint from the departments approved product list and meeting the requirements of standard spec 646 except in a grooved slot. Under this item a 20 mils application of epoxy pavement marking is required. Provide a double drop system of 5.3 pounds per gallon of 3M elements Series 70E wet reflective beads for white marking and 71E for yellow and Utah Performance beads mixture at a drop rate of 12-22 pounds per gallon:

US Mesh	Percent Passing (ASTM D1214)
18	65-80
20	
25	
30	30-50
40	
50	0-5

The beads will follow standard spec 646.2.3 except for (1) of the standard specifications. This product shall achieve a minimum of 250 mcd, initial, and 80 mcd, for white one year after placement, per ASTM E 2177, 45 seconds after the pavement marking is wetted.

C Construction

C.1 General

For quality assurance, provide the engineer and the Milwaukee County Traffic Engineering Section evidence of manufacturer training in the proper placement and installation of the wet reflective epoxy/ bead marking.

Plane the grooved lines according to details in the plan. Use grooving equipment with a free-floating, independent cutting or grinding head. Plane a minimum number of passes to create a smooth groove. Remove all temporary lane line and center line pavement markings during the grooving process.

C.2 Groove Depth

Cut the groove to a depth of 60 mils \pm 10 mils from the pavement surface. Measure depth using a straightedge placed perpendicular to the groove. The department will periodically check groove depths.

C.3 Groove Width – Longitudinal Markings

Cut the groove one-inch wider than the width of the pavement marking.

C.4 Groove Position

Position the groove edge according to the plan details at a minimum of 3 inches away from the joint edge. Groove a minimum of 4 inches, but not greater than, 12 inches from both ends of the pavement marking segment. Achieve straight alignment with the grooving equipment.

C.5 Groove Cleaning

Use a high-pressure air blower with at least 185 ft³/min air flow and 90 psi air pressure to clean the groove.

C.5.2 New Pavement

Groove pavement 10 or more days after paving.

If opening to traffic a lane that is not grooved, place temporary pavement marking. For lanes not open to traffic, temporary pavement marking is not required.

C.5.3 Existing Pavement

Check for structural integrity in supporting grooving operations. If the structural integrity of the pavement is inadequate to support grooving operations, immediately notify the engineer.

D Measurement

The department will measure Pavement Marking Grooved Epoxy (Width) in length by the linear foot, placed according to the contract and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Pavement Marking Grooved Epoxy 4-Inch	LF
SPV.0090.02	Pavement Marking Grooved Epoxy 8-Inch	LF

Payment is full compensation for cleaning and preparing the pavement surface; furnishing and installing the epoxy, elements and beads; removing lane line and/ or center line temporary pavement marking (during the grooving process).

59. Construction Staking, Concrete Sidewalk, Item SPV.0090.03.

A Description

Work under this item consists of contractor-performed construction staking required to establish the horizontal and vertical position for the concrete sidewalk and to establish the required positions of the pedestrian ramps. Perform all work under this item according to standard spec 650. Construction Staking, Concrete Sidewalk includes staking of the pedestrian ramps and includes staking of all median noses.

B (Vacant)

C Construction

Set construction stakes or marks at 50-foot intervals, maximum. Set and maintain stakes as necessary to achieve the required accuracy and to support the method of operations. Set additional construction stakes as necessary to establish location and grade of concrete sidewalk, including points of change in alignment grade, along intersecting walks, at pertinent points of the pedestrian ramps, and at the radius points of intersecting walks.

D Measurement

The department will measure Construction Staking Concrete Sidewalk by the linear foot acceptably completed, measured along each sidewalk centerline. The staking of the pedestrian ramps is incidental to the item Construction Staking Concrete Sidewalk and will not be measured. The department will not measure construction staking for base underlying concrete sidewalk. The department will not measure construction staking for concrete sidewalk abutting concrete curb and gutter.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.03	Construction Staking Concrete Sidewalk	LF

Payment for Construction Staking Concrete Sidewalk is full compensation for locating and setting all construction stakes; for relocating and resetting damaged or missing construction stakes and will be made according to standard spec 650. The staking of the pedestrian ramps is incidental to the item Construction Staking Concrete Sidewalk and will not be paid. The department will not pay for Construction staking of concrete sidewalk abutting concrete curb and gutter.

- 60. 5-Duct Conduit, Concrete Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.04; 4-Duct Conduit, Concrete Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.05; 2-Duct Conduit, Concrete Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.06; 1-Duct Conduit, Concrete Encased, 4-inch Rigid Nonmetallic Conduit DB-60, Item SPV.0090.07.**

A Description

This work consists of furnishing and installing cement encased multiple duct conduit packages below grade as shown on the plans and as hereinafter described.

B Materials

1. Conduit. Furnish and install DB-60 polyvinyl chloride (PVC) conduit. Conduit will be accepted on the basis of a Manufacturer's Certificate of Compliance and WISDOT field inspection upon delivery to a project.

PVC conduit and fittings shall conform to the requirements of Standard Specifications for Smooth-Wall Poly (Vinyl Chloride) (PVC) Conduit and Fittings for Underground Installation, ASTM Designation: F512 (latest edition).

2. Conduit Spacers. Furnish and install nonmetallic Snap-Loc 4 x 1 base spacer (part number S288NFN) and intermediate spacer (part number S289NFN) manufactured by Carlon or engineer (City of Milwaukee) approved equal.

3. Conduit Bed. Furnish and install a minimum 2" conduit bed of stone chips or crushed stone screenings conforming to the following:

3/8 Inch Crushed Stone Chips	
Sieve Sizes	% Passing by Weight
½"	100
3/8"	90-100
No. 8	0-15
No. 30	0-3

Crushed Stone Screenings	
Sieve Sizes	% Passing by Weight
½"	100
No. 4	75-100
No. 100	10-25

4. Concrete. The type of concrete mix to be used to encase the ducts will be:

Type I Cement	280 lbs
Fly Ash	100 lbs
Sharp Torpedo Sand	3100 lbs
Water	35 gals

Chryso Air 260 or approved equal	2.0 ozs
Chryso Plast 209 or approved equal	7.0 ozs
Air	5%

Mix the materials to provide an approximate 3 inch slump

5. Slurry Backfill. Aggregate slurry backfill consists of No. 1 concrete aggregate Class 'C' concrete mix with the cement deleted.

Fly Ash (Class C)	75 lbs.
Concrete Sand (Damp)	1830 lbs.
No. 1 Concrete Aggregate	1830 lbs.

Mix the materials with water to inundate the aggregate sufficiently to provide an approximate 3 inch slump. Deposit the mix in the trench directly from a concrete transit mix truck.

6. Pull Rope Pull rope specifications will be:

- ☐ Flat construction (7/16" to 5/8" wide)
- ☐ 100% woven aramid fiber (may include tracer wire)
- ☐ 1500 lbs. Minimum pull strength prelubricated
- ☐ sequential footage markings for location

For any questions on materials, contact Ms. Karen Rogne at (414) 286-3243.

C Construction

1. Excavation

The excavation shall have the minimum or maximum dimensions shown on the plans and as follows:

No. of Ducts Wide	Minimum	Maximum
1	8 1/2"	11"
2	14 1/8"	16 5/8"
3	19 3/4"	22 1/4"
4	25 3/8"	27 7/8"
5	31"	33 1/2"
6	36 5/8"	39 1/8"
7	42 1/4"	44 3/4"
8	47 7/8"	50 3/8"

These minimum and maximum trench widths apply to standard 4 inch PVC electrical duct only. When required, the excavation may be widened for the handling and placing of materials.

Sheath and brace open-cut trenches as required by code and as necessary to maintain safety. The cost of furnishing, placing and removing of sheathing and bracing shall be included in the unit bid for the work.

The dimensions of the excavation will be governed by the number, configuration and the grade (cover) to which the conduit is to be installed as shown on the plan. The walls of the excavation shall be clean and true.

Prior to excavating trenches, expose the existing manhole and conduit lines. The object of this is to permit adjustments in line and grade to avoid special construction methods. Protect the exposed manhole and conduit from damage.

Lay the conduit at a depth so that sufficient protection from damage is provided. Allowable covers shall be as follows:

The standard cover for mainline conduit is 39 inches and the minimum cover acceptable is 28 inches.

Maintain the standard cover wherever possible and any deviation less than the minimum cover requires the approval of the engineer.

Grade the trench to have a minimum pitch of three inches per 100 feet. When an obstruction is encountered in the trench and it is necessary to excavate a deeper trench than would otherwise be required, in order to obtain drainage, refer the matter to the engineer to determine whether the extra excavation should be made.

In grading a trench for mainline conduit, there are three general practices for direction of pitch.

(a) When grading a trench in a street with a level grade, the high point of the trench bottom should ordinarily be centered between manholes and pitched downward equally toward each manhole.

(b) Where the street slopes in one direction, locate the high point of the trench bottom approximately 30 feet from the end wall of the higher manhole and grade toward both manholes.

(c) Where a steep grade is encountered, grade the trench at the minimum pitch from the end wall of the higher manhole to a point 20 feet plus or minus toward the lower manhole. From this point, follow the street grade at the standard cover to a point 20 feet plus or minimum away from the end wall of the lower manhole. From this point, the remainder of the section shall be laid at the normal pitch.

After the rough excavation is completed, prepare the bottom of the trench to receive the conduit. Bring the duct bed to the final grade by grading uniformly from the high point to the low or drainage points. Use stone chips or crushed stone screenings to grade the trench. The duct bed shall be a minimum of 2" in depth.

2. Placing of Duct

Proceed with placing the ducts as soon as the duct bed has been completed. Inspect all ducts before placing to see that the bores are clean and free from mud, sand, etc. Use only ducts with a smooth bore, free from burrs, rough projections etc. Smooth off burrs or other rough areas likely to damage cable are found in the duct by rasping or scraping.

Place the duct on base spacers with the ends staggered so no two couplings are adjacent. This may be accomplished by the use of the short lengths in stock or cutting back full length sections to the desired lengths. If cut pieces are used, place the cut end at the manhole. Locate the base spacers within 2 feet of the end of each duct and one base spacer located in the middle of the duct.

Use full length pieces for the balance of the conduit line.

Formations of two ducts or more in height are to be carried forward in full formation, that is, as each tier of twenty foot lengths is laid, the next higher tier of ducts shall then be placed on the intermediate spacers. Place these intermediate spacers on top of the base spacers located within two feet from each duct end and one in the middle of each duct. Place the intermediate spacers and ducts for the remaining tiers. Glue each length into the adjoining coupling. A twist and push on the duct being placed will suffice for a water tight joint. Exercise caution in the driving operation, so that neither the coupling nor the duct will be split or damaged in any way. After the full formation has been completed, place wood trench and duct bracing on the ducts to prevent shifting or floating while the concrete envelope is being placed and during driving operation.

This procedure shall be followed with succeeding lengths, providing spacers at the proper intervals, until sufficient trench footage of completed formation has been placed and is ready to receive concrete encasement.

The terminating point for mainline conduit will be the inside manhole wall. Install a standard end bell fitting flush with the wall on all duct access points.

Install a #10 copper tracer wire along and above the centerline of the duct for encasement in the concrete. The wire shall be 4 feet longer than the run of conduit and be at least 2 feet long at each access point.

Install a pull rope in each run of conduit, as laid. The rope shall be 4 feet longer than the run of conduit and shall be doubled back at least 2 feet at each raceway access point. Anchor the pull rope at each access point in a manner acceptable to the engineer.

3. Concreting

Begin concreting after sufficient conduit has been laid and the trench and duct have been inspected. The minimum concrete encasement of the ducts is 3 inches on the top, 2 inches on the sides, and 3 inches on the bottom. After placing, puddle the concrete with a splicing bar or similar tool so that complete duct encasement is accomplished. Remove wood braces used to keep the conduit from floating before the concrete sets completely and the resultant encasement voids filled with concrete.

Allow the concrete encasement to set for a minimum of 6 hours before backfilling is commenced.

4. Slurry Backfill

Commence backfilling of the conduit immediately after the duct has been inspected, approved and has set to withstand the load.

Use an aggregate slurry as specified to backfill all concrete encased conduit. Slurry backfill the trench to the proposed or existing subgrade. Deposit the in the trench directly from a concrete transit mix truck.

D Measurement

The department will measure 5-Duct, 4-Duct, 3-Duct, 2-Duct and 1-Duct Cement Encased, 4-Inch Rigid Non-Metallic Conduit DB-60 by the linear foot, acceptably installed. The measured quantity will equal the linear feet of encased duct, based on the distance along the centerline of duct between ends of conduit. City of Milwaukee shall have final acceptance.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.04	5-Duct Conduit, Concrete Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	LF
SPV.0090.05	4-Duct Conduit Concrete Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	LF
SPV.0090.06	2-Duct Conduit Concrete Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	LF
SPV.0090.07	1-Duct Conduit Concrete Encased, 4-Inch Rigid Nonmetallic Conduit DB-60	LF

Payment is full compensation for furnishing the conduit, conduit bodies, conduit fittings, conduit spacers, end caps and trace wire; for excavating, bedding, encasement and backfilling including any concrete, stone, aggregate slurry, bracing, or other related materials; for disposing of surplus materials; and for making inspections, for installing the conduit.

61. Ductile Iron Water Main 8-Inch, Item SPV.0090.08; 12-Inch, Item SPV.0090.09; 16-Inch, Item SPV.0090.10.

A Description

This special provision describes the installation of 8-inch, 12-inch and 16-inch diameter Ductile Iron water main as shown on the plans.

A.1 General

Perform work under these items according to the details as shown on the plans and the requirements of the City of Milwaukee Water Main Installation Specifications, dated January 2, 1987 (City of Milwaukee Water Main Specifications). Additionally, perform all work according to the “Milwaukee Water Works Standard Plan Notes for Water Main Construction”, February 24, 2015. Notes 4, 6, 16, 17, 18 and 21 shall not apply to this project. In case of conflicts between the City of Milwaukee Water Main Specifications and the standard specifications or these special provisions, the requirements of the standard specifications and the special provisions shall govern. Contact Ms. Angela Baldwin at (414) 286-2813 to purchase copies of the required documents.

A.2 Submittals

Address all required submittals to Milwaukee Water Works as follows:

Superintendent
Milwaukee Water Works
Zeidler Municipal Building
841 North Broadway, Room 409
Milwaukee, WI 53202

A.3 Sequence of Construction

Due to the nature of this work, including traffic staging and coordination with other work, the contractor is advised there may be multiple mobilizations to complete the water main work. No additional payment will be made by the department for said mobilizations.

Determine sequence and schedule for water main construction, subject to the requirements herein.

Prepare and submit for review by the Superintendent of Milwaukee Water Works a detailed construction schedule stating the anticipated dates and duration of all interruptions in water service necessary to complete the work under the contract, including the abandonment of existing water mains.

B Materials

B.1 General

The City of Milwaukee will furnish valves and fittings required for installation on this project. Contact Mr. Ricardo Lopez, Inventory Manager, at (414) 286-6123 (or Mr. Kevin Gray, Inventory, at (414) 286-0669) for material supplies. Contractor shall furnish all ductile iron water main conforming to the latest version of the City of Milwaukee's Material Specifications. Material specifications can be found at the following website: <http://city.milwaukee.gov/water/business/standardspecs.htm>.

All materials will require inspection by the City of Milwaukee. Notify Mr. Karl Rohrbach, (414) 286-8148 or Mr. Steve Brengosz, (414) 708-2808, for materials inspection and the City of Milwaukee's Construction Section, (414) 286-2497, for construction inspection, four working days prior to starting construction.

Milwaukee Water Works will test all pipe, according to the City of Milwaukee Material Testing Specifications.

B.2 Valve Box Adapters

Install all valve boxes on gate valves with the use of valve box base adapters as detailed in the Standard Plan Notes Regarding Water Main Construction. Install the adapter in addition to the hardwood blocking.

C Construction

All costs for completing the work required for valve installations are to be included in the price for the Ductile Iron Water Main item(s).

Install fittings as shown on plans, incidental to respective ductile iron water main item(s). A list of fittings for each water main installation is provided on plans.

Permanent pavement restoration (approx. 10 Sq.Yd. of 8" concrete) is required at the water main work near Station 20+14 40' LT. All costs for permanent pavement at this location are to be included in the price for the Ductile Iron Water Main item(s).

The Milwaukee Water Works will shut off the water main to be altered and provide temporary hose connections to affected services as required.

Provide all surveying required to layout and construct the water main relocations.

Unless shown otherwise, backfill all water main excavations with granular backfill as specified in Section 14 of the City of Milwaukee Standard Plan Notes Regarding Water Main Construction.

Consolidate all backfill by mechanical compaction per specification 2.6.14(B) of the Standard Specifications for Sewer and Water Construction in Wisconsin. Per specification, the initial compacted lift shall be 2 feet, and the specification shall be modified to read, “each subsequent compacted lift of material shall be 1 foot”. Costs are to be included in the unit price bid for the water main. Settling the trench by flooding the backfill will not be allowed.

D Measurement

The department will measure Ductile Iron Water Main 8-Inch, Ductile Iron Water Main 12-Inch, Ductile Iron Water Main 16-Inch, by the linear foot of water main of the type and diameter specified, acceptably completed, including all construction parameters and requirements as described in this special provision.

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	Ductile Iron Water Main 8-Inch	LF
SPV.0090.09	Ductile Iron Water Main 12-Inch	LF
SPV.0090.10	Ductile Iron Water Main 16-Inch	LF

Payment is full compensation for providing all labor, equipment, materials (except hydrants, valves, and fittings provided by the City of Milwaukee) ; for furnishing all surveying; excavating, for sheeting and shoring; for forming foundation; for laying pipe; for removing valves; for installing all valves and fittings; for concrete base, buttresses, and anchors; for sealing joints and making connections to new or existing facilities; for providing granular backfill material, including bedding material; for backfilling; for removing sheeting and shoring; for permanent pavement restoration only where noted on plans and this special provision; for cleaning out the site of the work and incidentals necessary to complete the work.

62. Ductile Iron Hydrant Branch, 6-Inch, SPV.0090.11.

A Description

This special provision describes 6” diameter hydrant branch alterations.

A.1 General

Perform work under these items according to the details as shown on the plans and the requirements of the City of Milwaukee Water Main Installation Specifications, dated January 2, 1987 (City Water Main Specifications). Additionally, perform all work according to the “Milwaukee Water Works Standard Plan Notes for Water Main Construction”, February 24, 2015. Notes 4, 6, 16, 17, 18 and 21 shall not apply to this

project. In case of conflicts between the City Water Main Specifications and the standard specifications or these special provisions, the requirements of the standard specifications and the special provisions shall govern. Contact Ms. Angela Baldwin at (414) 286-2813 to purchase copies of the required documents.

B Materials

B.1 General

Furnish all ductile iron hydrant branch and other water main materials conforming to the latest version of the City of Milwaukee's Material Specifications. Material specifications can be found at the following website:

<http://city.milwaukee.gov/water/business/standardspecs.htm>

All materials will require inspection by the City of Milwaukee. Notify Mr. Karl Rohrbach, (414) 286-8148 or Mr. Steve Brengosz, (414) 708-2808, for materials inspection and the City of Milwaukee's Construction Section, (414) 286-2497, for construction inspection, four working days prior to starting construction.

City of Milwaukee Water Works will test all pipe, according to the City of Milwaukee Material Testing Specifications.

C Construction

All costs for completing the work required for valve installations on hydrant branches are to be included in the price for the Ductile Iron Hydrant Branch item.

Install fittings as shown on plans, incidental to respective ductile iron hydrant branch item. A list of fittings for each hydrant branch installation is provided on plans.

Unless shown otherwise, backfill all water main excavations with granular backfill as specified in Section 14 of the City of Milwaukee Standard Plan Notes Regarding Water Main Construction.

Consolidate all backfill by mechanical compaction per specification 2.6.14(B) of the Standard Specifications for Sewer and Water Construction in Wisconsin. Per specification, the initial compacted lift shall be 2 feet, and the specification shall be modified to read, "each subsequent compacted lift of material shall be 1 foot". Costs are to be included in the unit price bid for the water main. Settling the trench by flooding the backfill will not be allowed.

D Measurement

The department will measure Ductile Iron Hydrant Branch, 6-Inch by the linear foot of hydrant branch of the type and diameter specified, acceptably completed, including all construction parameters and requirements as described in this special provision.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.11	Ductile Iron Hydrant Branch, 6-Inch	LF

Payment is full compensation for providing all materials (except hydrants provided by the City) including all valves, fittings, and accessories required; for furnishing all surveying; excavating, for sheeting and shoring; for forming foundation; for laying pipe; for concrete base, buttresses, and anchors; for bulkheading and abandoning existing water mains; for sealing joints and making connections to new or existing facilities; for providing granular backfill material, including bedding material; for backfilling; for removing sheeting and shoring; for cleaning out the site of the work and incidentals necessary to complete the work.

63. Emergency Vehicle Preemption System, Item SPV.0105.01 (ID 2216-01-70); Item SPV.0105.04 (ID 2216-02-70).

A Description.

This special provision covers work under ID 2216-01-70 consists of furnishing and installing an Emergency Vehicle Preemption (EVP) System at the W. Mill Rd and N. Teutonia Ave intersection, as shown on the plans and as hereinafter provided.

This special provision covers work under ID 2216-02-70 consists of furnishing and installing an Emergency Vehicle Preemption (EVP) System at the W. Mill Rd and N. Teutonia Ave intersection, as shown on the plans and as hereinafter provided.

B Materials.

The Emergency Vehicle Preemption System shall include Opticom discriminator Model 454 and Model 711 detectors. Furnish and install this equipment. Mount the discriminator in a card rack included as part of the signal cabinet.

C Construction.

Mount detectors on the mast arms as shown on the Plans. Drill and tap the traffic signal mast arms and poles to accommodate the mounting of the detector units as shown in the Plans. The engineer will approve the installation method.

In the event, at installation, a noticeable obstruction is present in line with the detector, advise the engineer before installation.

Unless otherwise directed by the engineer, install the detector shield tube with the drain hole at the bottom.

NO detector cable splices from the detector assembly to the controller terminations are allowed. Coil a minimum of extra 20 feet of cable at each pull box.

Route the EVP detector cables to the controller. Mark each lead appropriately as to which direction 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 (Project) as a lump sum unit of work, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Emergency Vehicle Preemption System	LS
SPV.0105.04	Emergency Vehicle Preemption System	LS

Payment is full compensation for furnishing and installing all equipment, cabling, necessary additional items, testing and setting up the system.

64. 18-Inch Steel Casing Pipe Jacked and Bored, Item SPV.0105.02.

A Description

This work consists of furnishing and installing 75 feet of an 18-Inch steel casing pipe containing five 4-Inch Schedule 40 PVC carrier pipes bored and jacked under the Union Pacific Railroad tracks as shown on the plans and as hereinafter described. Contractor must abide by all terms and conditions of the Union Pacific Railroad permit obtain by the City of Milwaukee. City of Milwaukee will be responsible for all permit costs.

B Materials

1. Steel Pipe Casing

Steel pipe casing shall be manufactured from steel conforming to ASTM Grade 2 as amended to date, with a minimum yield strength of 35,000 psi before cold forming.

Wall thickness for a steel casing pipe for E₈₀ loading (including impact) are:

Nominal Diameter (Inches)	Min. Thickness for Coated (Inches)	No Coated Inches
14 and Under	0.188	0.250
16	0.219	0.281
18	0.250	0.312
20	0.281	0.344

2. Conduit

Furnish and install five 4" Schedule 40 polyvinyl chloride (PVC) conduit within the steel casing pipe. Conduit will be accepted on the basis of a Manufacturer's Certificate of Compliance and WISDOT field inspection upon delivery to a project.

PVC conduit and fittings shall conform to the requirements of Standard Specifications for Smooth-Wall Poly (Vinyl Chloride) (PVC) Conduit and Fittings for Underground Installation, ASTM Designation: F512 (latest edition).

3. Conduit Spacers

Furnish and install Underground Devices, Inc. Hybrid Type Bore Spacers, Catalog Number: BS3555W2 or approved equal according to manufacturer's recommendations.

4. Casing End Seals

End seals shall be made of synthetic rubber, conical shape, pull-on or wrap around style with Type 304 stainless steel bands.

5. Slurry Backfill

Aggregate slurry backfill consists of No. 1 concrete aggregate Class 'C' concrete mix with the cement deleted.

Fly Ash (Class C)	75 lbs.
Concrete Sand (Damp)	1830 lbs.
No. 1 Concrete Aggregate	1830 lbs.

Mix the materials with water to inundate the aggregate sufficiently to provide an approximate 3 inch slump. Deposit the mix in the trench directly from a concrete transit mix truck.

6. Pull Rope

Pull rope specifications will be:

- Flat construction (7/16" to 5/8" wide)
- 100% woven aramid fiber (may include tracer wire)
- 1500 lbs. Minimum pull strength prelubricated
- sequential footage markings for location

For any questions on materials, contact Ms. Karen Rogney at (414) 286-3243.

C Construction

1. Excavation of Jacking/Receiving Pit

Methods of construction for jacking/receiving pits shall be such as to ensure the safety of the contractor's employees, the public, existing utilities, and adjacent property. Provide complete groundwater control for excavations at all times. Perform jacking/receiving pit excavations using appropriate excavation or large hole drilling methods as required. Inspect pit excavations daily to check safety of excavation and structural integrity of support system. Once initiated, jacking operations shall continue without interruption.

2. Boring

The boring shall be accomplished by means of auguring to the size, line and grade shown on the plans or directed by the engineer. The diameter of the bore shall be minimal to

complete the jack and boring operations. Re-drill pilot hole when bore does not meet specifications.

3. Jacked and Bored Casing

Bore hole diameter shall not exceed outside diameter of casing by more than 1 inch. For casing: Weld sections of casing pipe together to provide watertight joints. Welds shall be continuous, complete joint penetration butt joint welds as required for rigid and watertight connections. Monitor movement of railroad tracks and provide results to the engineer. Stop operations if movement exceeds ¼ inch and immediately notify engineer.

4. Installation of Carrier Pipes within Casing

Entire length of casing shall be installed complete and inspected and approved by the engineer before the carrier pipes are placed within. Inspect PVC pipe joints prior to installing pipes and spacers into the casing pipe.

Install a #10 copper tracer wire along and above the centerline of the PVC ducts.
Install a pull rope in each run of conduit, as laid.

Casing end seals shall be installed on the ends of the casing pipe after installation of the carrier pipes.

5. Slurry Backfill

Commence backfilling of the conduit immediately after the duct has been inspected, approved and has set to withstand the load.

Use an aggregate slurry as specified to backfill all concrete encased conduit. Slurry backfill the trench to the proposed or existing subgrade. Deposit the in the trench directly from a concrete transit mix truck.

D Measurement

The department will measure 18-Inch Steel Casing Pipe Jacked and Bored, as a single lump sum 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.0105.02	18-Inch Steel Casing Pipe Jacked and Bored	LS

Payment is full compensation for furnishing and installing 75 feet of an 18-Inch steel casing, five 4-Inch Schedule 40 PVC carrier pipes, conduit fittings, conduit spacers, casing end seals, pull ropes and trace wire; for excavating, and backfilling including any concrete, stone, aggregate slurry, bracing, or other related materials; for disposing of surplus materials; and for making inspections, for installing the conduit.

65. Concrete Pavement Joint Layout, Item SPV.0105.03.

A Description

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

B (Vacant)

C Construction

Plan and locate all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete to prevent uncontrolled cracking. Submit a joint layout design to the engineer before paving each intersection. Mark the location of all concrete joints in the field. Follow the plan details for joints in concrete making adjustments as required to fit field conditions.

D Measurement

The department will measure Concrete Pavement Joint Layout as a single lump sum unit for all joint layout designs and marking, acceptably completed under the contract.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.03	Concrete Pavement Joint Layout	LS

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

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

66. Test Rolling, Item SPV.0170.01.

A Description

This work consists of testing the stability of the finished earth subgrade by rolling with a tri-axle dump truck, the restoration of any soft or yielding areas evidenced by the test rolling, and retesting as determined by the engineer.

B Equipment

Fully load the tri-axle dump truck to within 3 tons of the vehicle legal load limit and provide a minimum gross vehicle weight of 27 tons. Uniformly inflate all tires to the pressure recommended by the manufacturer for the applicable wheel load when test rolling.

C Construction

Shape and completely compact the earth subgrade to be test rolled and shape to approximate grade and cross section; but not yet staked for blue top grades. The test rolling

takes place at normal walking speed under the direction of the engineer or their representative.

Roll the earth subgrade to a width equal to the finished base course width. Make multiple passes with the truck throughout the length of the subgrade test area. Center each pass on a proposed lane or applicable shoulder. When the shoulder width is less than 8 feet, the engineer will determine the number and location of passes required such that any wheel track will be within 3 to 4 feet of the previous adjacent wheel track.

Repair and consolidate any soft or yielding areas or depressions evidenced under the action of the test rolling to withstand retesting. Corrective work may require the excavation and replacement of unstable material from the roadbed with selected materials. Correct yielding subgrade areas discovered during the test rolling operations prior to blue top staking and finish grading operations. Do corrective work according to the standard specifications.

D Measurement

The department will measure Test Rolling of the earth subgrade per station along the roadway centerline or reference line, acceptably completed. When two or more separate roadways occur, the quantity of test rolling will be measured by the station along each separate roadway as designated on the plans.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0170.01	Test Rolling	STA

Payment is full compensation for performing all the work of Test Rolling; for any preparation of the subgrade, including the furnishing and incorporation of water, if required; for retesting as determined by the engineer and for restoration of the subgrade.

67. Geogrid Reinforcement, Item SPV.0180.01.

A Description

This work consists of furnishing and installing geogrids for subgrade stabilization, base reinforcement, or pavement structure applications according to the plans and specifications.

B Materials

The geogrid shall consist of either single or joined multiple layers of a uniform rectangular grid of bonded, formed, or fused polymer tensile strands crossing with a nominal right angle orientation. The polymer shall consist of polyester, polypropylene, polyamide, or polyethylene. The grid shall maintain dimensional stability during handling, placing, and installation. The geogrid shall be insect, rodent, mildew, and rot resistant. Minimum geogrid width shall be 6.0 feet.

The geogrid shall comply with the following physical properties:

<u>Test</u>	<u>Method</u>	<u>Value</u> ⁽¹⁾
Tensile Strength at 5% Strain, Both Principal Directions (lb./ft.)	ASTM D 4595 ⁽²⁾	700 min.
Flexural Rigidity Both Principal Directions (mg-cm)	ASTM D 1388 ⁽³⁾	150,000 min.
Aperture Area (in ²)	Inside Measurement ⁽⁴⁾	5.0 max.
Aperture Dimension (in.)	Inside Measurement ⁽⁴⁾	0.5 min.

(1) (1) All numerical values represent minimum/maximum average roll values, i.e., the average minimum test results on any roll in a lot should meet or exceed the minimum specified value.

(2) (2) Compute the tensile strength (T) of a joined multi-layered geogrid using the following equation:

$$T = n(ft)$$

where n = the number of individual layers in the joined multi-layered geogrid;

t = the tensile strength of a single layer of geogrid as determined using testing method ASTM D4595; and

f = reduction factor based on the number of layers comprising the multi-layered system and determined by the equation $f = 1.00 - [0.04(n - 1)]$.

(3) (3) Determine values by Option “A” (Cantilever Test) of testing method ASTM D1388 using test specimens that are 36 inches \pm 0.04 inch long. Test specimen widths for differing geogrids shall be variable and equal to 1 element plus $\frac{1}{2}$ the aperture width on both sides of that element. An element is defined as the minimum number of parallel strands which form a distinguishable repeating pattern.

(4) (4) Aperture Area and Aperture Dimension for joined multi-layered geogrids shall be determined based on measurement of a single layer of the geogrid.

Protect the geogrid from ultraviolet radiation and from damage due to shipping and handling. Keep the geogrid dry until it is installed. Clearly mark the geogrid rolls to identify the material contained.

Deliver a sample of the geogrid material to the engineer at least ten days prior to its incorporation into the work. At the same time, furnish a manufacturer’s Certified Report of Test or Analysis that verifies that the geogrid delivered for use on the work meets the above requirements. Samples of geogrid for test purposes will be obtained from the job site for each 10,000 square yards or portions thereof used on the contract.

C Construction

Prior to placement of the geogrid, bring the indicated placement surface to the required line, grades, and dimensions as shown on the plans. Smooth and shape the surface to eliminate any rocks, clods, roots, or other items which may cause damage to the geogrid during placement or covering. Place the geogrid on the prepared surface at the locations and to the limits as shown on the plans. After placement, pull the geogrid taut and secure with pins, clips, staples, or other devices to prevent movement or displacement. Place parallel strips of geogrid with a minimum overlap of 6 inches. Lap butt joints between roll ends a minimum of 12 inches. Fasten all lapped sections together by the use of ties, straps, clips, or other devices to develop a secure joint which meets the approval of the engineer. Do not permit vehicles or construction equipment to operate directly on the geogrid.

Cover small rips, tears, or defects in the geogrid with an additional section of geogrid which and secure in place so as to overlap the damaged area by at least three feet in all directions. Remove and replace Geogrid sections with large rips, tears, defects, or other damage at the direction of the engineer. The contractor is responsible for all costs to repair or replace damaged or defective geogrid.

After placement, cover the geogrid to the indicated depth with the type of material required on the plans or in the Special Provisions. Placing, spreading, and compacting of this material shall comply with the applicable sections of the Standard Specifications or Special Provisions except that the initial lift of material placed on the geogrid must be at least four inches. Place, spread, and compact materials so that the geogrid is not displaced or damaged. The engineer may require changes in equipment and/or operations to prevent such damage or displacement.

D Measurement

The department will measure Geogrid Reinforcement by the square yard of surface area upon which the geogrid has been placed and accepted.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.01	Geogrid Reinforcement	SY

Payment is full compensation for furnishing, transporting, and installing the geogrid; for furnishing and installing all devices and materials necessary to join or secure the geogrid in place.

68. Management of Solid Waste, Item SPV.0195.01.

A General

A.1 Description

This work will conform with the requirements of Standard spec 205; to pertinent parts of the Wisconsin Administrative Code, Chapters NR 700-736 Environmental Investigation and

Remediation of Environmental Contamination; Wisconsin Administration Code, Chapters NR 500-538, Solid Waste; and as shown on the plans and as supplemented herein.

Soil containing solid waste will be encountered within the construction limits. The solid waste contains NR 500 non-exempt industrial wastes including soil mixed with foundry sand, slag, and glass. The soil may also contain chlorinated solvents. Impacted waste material excavated during construction which cannot in the opinion of the environmental consultant be managed as common excavation or as petroleum-contaminated soil will be managed as solid waste.

This work consists of excavating, segregating, temporary stockpiling, loading, hauling, and disposing of solid waste material at a WDNR-approved disposal facility. The nearest WDNR-approved disposal facilities are:

Advanced Disposal Emerald Park Landfill, LLC
W124 S10629 S. 124th St
Muskego, WI 53150
Phone (414) 529-1360

Waste Management Orchard Ridge Landfill
N96 W13503 County Line Rd.
Menomonee Falls, WI 53051
Phone (262) 253-8620

Provide information to the environmental consultant and engineer that indicates the WDNR-approved disposal facility that the contractor will use.

A.2 Notice to the Contractor–Solid Waste and Contaminated Groundwater Locations

The department and others completed hazardous materials assessment for locations within this project where excavation is required. Investigation for soil and groundwater contamination was conducted at select locations. Results indicate that solid waste and contaminated groundwater are present at the following locations as shown on the plans:

- Station 8+75 to 10+00, from approximately 25 feet left of reference line to 85 feet right of reference line, from approximately 0 to 1 feet bgs. Soil at this location contains foundry sand. Approximately 204 cubic yards (approximately 347 tons at an estimated 1.7 tons per cubic yard) of soil containing non-exempt solid waste will be excavated from this area.
- Station 24+00 to 43+50, from project limits left to project limits right, from approximately 0 to 8+ feet bgs. Soil at this location contains foundry waste, glass, and miscellaneous debris. Soil and groundwater at this location is contaminated with petroleum compounds, volatile organic compounds (including chlorinated solvents), PCBs, and metals. Approximately 9912 cubic yards (approximately 16850 tons at an estimated 1.7 tons per cubic yard) of soil containing non-exempt solid waste will be excavated from this area.

- Station 50+50 to 52+75, from project limits left to project limits right, from approximately 6'+ feet bgs. Soil and groundwater at this location contains chlorinated solvents and petroleum. Approximately 0 cubic yards (approximately 0 tons at an estimated 1.7 tons per cubic yard) of soil classified as solid waste will be excavated from this area. Excavation in this area is expected be 3 feet or less bgs. If dewatering is necessary at this location, the water will require proper handling and disposal.

Directly load fill with solid waste excavated by the project at the above locations into trucks that will transport the material to a WDNR-licensed landfill facility for landfill disposal.

If obviously contaminated soils or other signs of NR 500 non-exempt solid waste and hazardous materials are unexpectedly encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. Examples of these unexpected conditions may include, but are not limited to, buried containers or tanks, noxious odors and fumes, stained soils, sheen on ground water, other industrial wastes, and significant volumes of municipal or domestic garbage.

No active groundwater monitoring wells were observed within the construction limits. If active groundwater monitoring wells are encountered during construction, notify engineer and protect them to maintain their integrity. The environmental consultant will determine if monitoring wells need to be maintained. For monitoring wells that do need to be maintained, adjust the wells that do not conflict with structures or curb and gutter to be flush with the final grade. For wells that conflict with the previously mentioned items or if monitoring wells are not required to be maintained, they will be abandoned by others.

If dewatering is required at the above locations, conduct the dewatering according to Section C below.

A.3 Excavation Management Plan Approval

The excavation management plan for this project has been designed to minimize the off-site disposal of contaminated waste. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding previous investigation and remediation activities in these areas contact:

Name: Andrew Malsom
 Address: 141 NW Barstow Street, Waukesha, WI 53187-0798
 Phone: (262) 548-6705
 Fax: (262) 548-6891
 E-mail: andrew.malsom@dot.state.wi.us

A.4 Coordination

Coordinate work under this contract with the environment consultant:

Consultant:	TRC Environmental Corporation
Address:	150 N. Patrick Blvd. Ste. 180, Brookfield, WI 53045
Contact:	Bryan Bergmann, P.G.
Phone:	(262) 901-2126
Fax:	(262) 879-1220
E-mail:	bbergmann@trcsolutions.com

The role of the environmental consultant will be limited to:

1. Determining the location and limits of solid waste to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
2. Identifying soils to be hauled to the landfill facility;
3. Documenting that activities associated with management of solid waste are in conformance with the solid waste management methods for this project as specified herein; and
4. Obtaining the necessary approvals for disposal of solid waste from the landfill facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the area of solid waste fill described in A.2 to the environmental consultant. Identify the WDNR licensed landfill facility that will be used for disposal of solid waste, and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation in the impacted area or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals from the landfill facility for disposal of the solid waste.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation in the impacted area. Notify the environmental consultant at least three calendar days prior to commencement of excavation in the impacted area. Perform excavation in the impacted area on a continuous basis until excavation work is completed. Do not transport soil containing solid waste offsite without prior approval from the environmental consultant.

A.5 Health and Safety Requirements

Supplement standard spec 107.1 with the following:

During excavation activities, expect to encounter historic fill contaminated with industrial wastes (foundry sand and slag) and associated regulated metals and organic compounds. Site

workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

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

B (Vacant)

C Construction

Supplement standard spec 205.3 with the following:

Control operations in the impacted area to minimize the quantity of soil excavated.

The environmental consultant will periodically monitor soil excavated from the areas identified in A.2 above. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

Directly load and haul solid waste designated by the environmental consultant for offsite disposal to the WDNR approved landfill facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of the material. Prior to transport, sufficiently dewater soils designated for off-site disposal so as not to contain free liquids.

Verify that the vehicles used to transport material are licensed for such activity according to applicable state and federal regulations. Obtain the necessary disposal facility approvals and WDNR approvals for disposal. Do not transport regulated solid waste off-site without obtaining the approval of the environmental consultant and engineer and notifying the disposal facility.

During excavations in the areas of known contamination, larger chunks of clean concrete (~2 cubic feet), asphalt and bricks will be segregated from the fill, to the extent practical and managed as common excavation. Under NR 500.08 this material is exempt from licensing and requirements of Wisconsin Administrative Code NR 500-538 of the solid waste regulations, and will be reused as designated by the engineer as fill on the project, or it will be disposed of off-site at the contractor's disposal site(s).

If dewatering is required in areas of known contamination, water generated from dewatering activities may contain VOCs, PCBs, and/or metals. Such water may, with approval of the

City of Milwaukee and/or Glendale and the Milwaukee Metropolitan Sewerage District (MMSD), be discharged to the sanitary sewer as follows:

1. Meet all applicable requirements of the MMSD including the control of suspended solids. Perform all necessary monitoring to document compliance with MMSD's requirements. Furnish, install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with MMSD's requirements.
2. Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities.

Notify the engineer of any dewatering activities, and obtain any permits necessary to discharge water. Provide copies of such permits to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statutes, judiciary decisions, and regulations of the State of Wisconsin.

Costs associated with excavation dewatering in contaminated areas are considered incidental to this pay item. The Wisconsin Department of Transportation will be the generator of regulated solid waste from this construction project.

D Measurement

The volume of Solid Waste will be deducted from the quantity of the Excavation Common item. The volume of Excavation Common will be reduced 1 cubic yard for each 1.7 tons of waste. The department will measure Management of Solid Waste by the ton of waste accepted by the disposal facility and as documented by weight tickets. No adjustments will be made for storm sewer excavations.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.01	Management of Solid Waste	Ton

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

**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 4 (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 2 (number) TrANS Apprentice(s) be utilized on this contract.

- 3) The maximum duration of reimbursement is two years as a TrANS graduate plus time in apprentice status.
- 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 underrepresentation 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://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx>

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
<http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/ucp-directory.xlsx>
- 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

<http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.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://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/policy-statement.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

Phone: _____
Fax: _____
Email: _____

DBE Contractor Contact Person

Phone: _____
Fax: _____
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:

550.5.2 Piling

Add the following as paragraph three effective with the December 2015 letting:

- (3) The department will not entertain a change order request for a differing site condition under 104.2.2.2 or for a quantity change under 104.2.2.4.3 for the Piling bid items. Instead the department will adjust pay under the Piling Quantity Variation administrative item if the total driven length of each size is less than 85 percent of, or more than 115 percent of the contract quantity as follows:
- | Percent of Contract Length Driven | Pay Adjustment |
|-----------------------------------|--|
| < 85 | (85% contract length - driven length) x 20% unit price |
| > 115 | (driven length - 115% contract length) x 5% unit price |

643.2.1 General

Replace paragraph two with the following effective with the December 2015 letting:

- (2) Use reflective sheeting from the department's approved products list on barricades, drums, and flexible tubular marker posts.

Errata

Make the following corrections to the standard specifications:

641.2.9 Overhead Sign Supports

Correct errata adding back accidentally deleted paragraphs one through three.

- (1) Provide commercially fabricated overhead sign supports conforming to AASHTO design and fabrication standards for structural supports for highway signs, luminaires, and traffic signals. Use a design life of 50 years with a wind importance factor of 1.00. Design to withstand a 3 second gust wind speed of 90 mph. Do not use the methods of appendix C of those AASHTO standards.
- (2) Design structures, listed as applicable structure types in the AASHTO standards, to the fatigue category criteria as follows:
 1. Structures carrying variable message signs:
 - Category I criteria for structures over all roadway types.
 2. Structures carrying type II or III signs:
 - Category I criteria for structures used over highways and free flow ramps.
 - Category II criteria for structures with arms greater than 30 feet used over local roads and city streets.
 - Category III criteria for structures with arms 30 feet or less used over local roads and city streets.
- (3) Use the posted speed limit of the roadway beneath the structure for truck-induced gusts.
- (4) Submit shop drawings identified by structure number, design computations, and material specifications, to the engineer before erecting sign supports. Provide tightening procedures for mast arm or luminaire arm to pole shaft connections on the shop drawings. Have a professional engineer registered in the state of Wisconsin sign, seal, and date the shop drawings and certify that the design conforms to AASHTO standards and the contract.
- (5) Provide steel pole shafts and mast arms zinc coated according to ASTM A123. Provide tapered pole and arm shafts with a minimum taper of 0.14 inch per foot for single-member vertical and single-member horizontal structure components. Provide bolts and other hardware conforming to 641.2.2.

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://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx>

(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://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf>

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (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 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 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:

<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>	<u>County</u>	<u>%</u>
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.

Effective August 2015 letting

BUY AMERICA PROVISION

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or \$2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this "Buy America" provision.

<http://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf>

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

<http://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc>

Cargo Preference Act Requirement

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

(a) Agreement Clauses. “Use of United States-flag vessels:”

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.”

(b) Contractor and Subcontractor Clauses. “Use of United States-flag vessels: The contractor agrees—”

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

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
- II. Payroll Requirements
- III. Postings at the Site of the Work
- IV. Affidavits
- V. Wage Rate Redistribution
- VI. Additional Classifications

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 contracts.

While the wage rates shown are the minimum rates required by the contract to be paid during its life, this is not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price 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
MILWAUKEE 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, 2015

CLASSIFICATION: Contractors are required to call the Department of Workforce Development if there are any questions regarding 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.

<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	35.37	17.99	53.36
Carpenter	33.68	19.99	53.67
Cement Finisher	32.75	19.21	51.96
Future Increase(s): 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	33.93	22.77	56.70
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.			
Fence Erector	23.73	19.09	42.82
Ironworker	30.77	23.97	54.74
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.			
Line Constructor (Electrical)	37.43	18.19	55.62
Painter	29.22	16.69	45.91
Pavement Marking Operator	30.27	18.79	49.06
Piledriver	30.11	26.51	56.62
Future Increase(s): Add \$1.50/hr on 6/1/2015; Add \$1.60/hr on 6/1/2016.			
Premium Pay: Add \$.65/hr for Piledriver Loftsmen; Add \$.75/hr for Sheet Piling Loftsmen. 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.			
Roofer or Waterproofing	29.40	17.05	46.45
Teledata Technician or Installer	24.89	17.15	42.04
Tuckpointer, Caulker or Cleaner	33.76	17.82	51.58

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Underwater Diver (Except on Great Lakes)	35.40	15.90	51.30
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	35.55	15.57	51.12
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	31.60	14.64	46.24
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	27.65	13.44	41.09
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.68	12.83	38.51
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	11.63	33.38

TRUCK DRIVERS

Single Axle or Two Axle	25.18	18.31	43.49
Future Increase(s): Add \$1.15/hr on 6/1/2015. 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.			
Three or More Axle	25.28	18.31	43.59
Future Increase(s): Add \$1.15/hr on 6/1/2015. 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	30.27	21.15	51.42
Future Increase(s): 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 .			
Pavement Marking Vehicle	23.16	17.13	40.29
Shadow or Pilot Vehicle	24.37	17.77	42.14
Truck Mechanic	24.52	17.77	42.29

LABORERS

General Laborer	27.06	20.03	47.09
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 Premium Pay: Add \$.15/hr for air tool operator, joint sawer and filler (pavement), vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add \$.35/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add \$.50/hr for line and grade specialist; Add \$.65/hr for blaster and powderman; Add \$2.01/hr for topman; Add \$2.46/hr for bottomman; Add \$3.23/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	22.05	18.41	40.46
Landscaper	27.06	20.03	47.09
Future Increase(s): Add \$1.05/hr eff. 06/01/2015; Add \$1.00/hr eff. 06/01/2016; Add \$1.00/hr eff. 06/01/2017 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 \$1.25/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	22.55	19.37	41.92

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.71	16.01	33.72
Railroad Track Laborer	14.50	4.39	18.89

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 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type).	37.72	21.15	58.87
--	-------	-------	-------

Future Increase(s): 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 Mfr.'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.	37.22	21.15	58.37
---	-------	-------	-------

Future Increase(s): 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 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 Mfr.'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);	36.72	21.15	57.87
--	-------	-------	-------

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A- Frames. Future Increase(s): 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 .			
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 Sawyer (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. Future Increase(s): 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 .	36.46	21.15	57.61
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. Future Increase(s): 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 .	36.17	21.15	57.32
Fiber Optic Cable Equipment.	28.89	17.95	46.84
Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	41.65	21.71	63.36
Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	41.65	21.71	63.36
Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	35.72	17.85	53.57
Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks-Great Lakes ONLY.	35.46	20.40	55.86

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI160010

DATE: March 11, 2016

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORERS CLASSIFICATION:		Basic Hourly Rates	Fringe Benefits		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	\$27.51	19.35	<u>Truck Drivers:</u>		
				1 & 2 Axles	25.63	18.96
				Three or More Axles; Euclids, Dumptor & Articulated, Truck Mechanic.....	25.63	18.96
Group 2:	Air Tool Operator; Joint Sawyer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated); Chain Saw Operator; Demolition Burning Torch Laborer	27.66	19.35			
Group 3:	Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man.....	27.86	19.35			
Group 4:	Line and Grade Specialist	28.01	19.35			
Group 5:	Blaster and Powderman	28.16	19.35			
Group 6:	Flagperson traffic control person	24.00	19.35			

CLASSES OF LABORER AND MECHANICS

Bricklayer	36.74	18.19
Carpenter	30.52	14.41
Piledriverman	27.25	19.46
Ironworker	32.36	24.07
Cement Mason/Concrete Finisher	30.69	17.53
Electrician		See Page 3
Line Construction		
Lineman.....	42.14	32% + 5.00
Heavy Equipment Operator	40.03	32% + 5.00
Equipment Operator.....	33.71	32% + 5.00
Heavy Groundman Driver.....	26.78	14.11
Light Groundman Driver	24.86	13.45
Groundsman.....	23.18	32% + 5.00
Millwrights.....	26.32	13.98
Painter, Brush.....	29.52	20.04
Painter, Spray and Sandblaster	30.27	20.04
Painter, Bridge.....	29.87	20.04
Well Drilling:		
Well Driller.....	16.52	3.70

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 8, 2016; Modification #1 dated January 29, 2016; Modification #2 dated February 26, 2016; Modification #3 dated March 11, 2016.

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin

GENERAL DECISION NUMBER: WI160010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: March 11, 2016

<u>POWER EQUIPMENT OPERATORS CLASSIFICATION:</u>	<u>Basic Hourly Rates</u>	<u>Fringe Benefits</u>	<u>POWER EQUIPMENT OPERATORS CLASSIFICATION: (Continued)</u>	<u>Basic Hourly Rates</u>	<u>Fringe Benefits</u>
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	\$38.27	\$21.55	(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.	\$37.27	\$21.55
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.	\$37.77	\$21.55	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.	\$37.01	\$21.55
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			Group 5: Air compressor; power pack; vibratory hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; concrete proportioning plants generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; oiler; pump (over 3 inches); drilling machine helper.	\$36.72	\$21.55
			Group 6: Off - road material hauler with or without ejector.....	\$30.82	\$21.55
			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: WI160010

DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

DATE: March 11, 2016

LABORERS CLASSIFICATION:

Rates

Benefits

			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.
Electricians				
Area 1	\$29.60	26.5%+ 9.15		
Area 2:				
Electricians.....	31.21	18.92	Area 5 -	ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausauke), 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 3:				
Electrical contracts under \$130,000	28.96	18.26		
Electrical contracts over \$130,000	31.16	18.34		
Area 4:	29.84	29.50% + 9.37		
Area 5	28.96	24.85% + 9.70		
Area 6	37.02	29%+9.77	Area 6 -	KENOSHA COUNTY
Area 8				
Electricians.....	31.90	24.95% + 10.46	Area 8 -	DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES
Area 9:				
Electricians.....	35.75	19.87		
Area 10	29.64	20.54	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 11	33.90	24.47		
Area 12	34.98	19.89	Area 10 -	CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig, and SHEBOYGAN COUNTIES
Area 13	35.13	23.26		
Teledata System Installer				
Area 14			Area 11 -	DOUGLAS COUNTY
Installer/Technician	22.50	12.72		
Sound & Communications			Area 12 -	RACINE (except Burlington township) COUNTY
Area 15				
Installer	16.47	14.84	Area 13 -	MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES
Technician	26.00	17.70	Area 14 -	Statewide.
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 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.
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, TREMPLEAU, VERNON and WASHBURN COUNTIES			
Area 3 -	FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)			

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 omission of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate. The higher of state or federal rate will apply.

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS

SECTION 0001 0010 PARTICIPATING ROADWAY ITEMS

0010	201.0105 Clearing	11.000 STA	.		.	
0020	201.0120 Clearing	596.000 ID	.		.	
0030	201.0205 Grubbing	11.000 STA	.		.	
0040	201.0220 Grubbing	716.000 ID	.		.	
0050	203.0100 Removing Small Pipe Culverts	8.000 EACH	.		.	
0060	204.0100 Removing Pavement	22,400.000 SY	.		.	
0070	204.0150 Removing Curb & Gutter	7,600.000 LF	.		.	
0080	204.0155 Removing Concrete Sidewalk	1,700.000 SY	.		.	
0090	204.0170 Removing Fence	300.000 LF	.		.	
0100	204.0185 Removing Masonry	10.000 CY	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0110	204.0200 Removing Railroad Track	90.000 LF	.		.	
0120	204.0210 Removing Manholes	2.000 EACH	.		.	
0130	204.0215 Removing Catch Basins	27.000 EACH	.		.	
0140	204.0245 Removing Storm Sewer (size) 01. 8-INCH	55.000 LF	.		.	
0150	204.0245 Removing Storm Sewer (size) 02. 12-INCH	315.000 LF	.		.	
0160	204.0245 Removing Storm Sewer (size) 03. 18-INCH	35.000 LF	.		.	
0170	204.0250 Abandoning Manholes	3.000 EACH	.		.	
0180	204.0280 Sealing Pipes	6.000 EACH	.		.	
0190	204.0291.S Abandoning Sewer	900.000 CY	.		.	
0200	205.0100 Excavation Common	30,000.000 CY	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:

PROJECT(S):

FEDERAL ID(S):

20160510018

2216-01-70

WISC 2016169

2216-02-70

WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0210	205.0501.S Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	460.000 TON	.		.	
0220	213.0100 Finishing Roadway (project) 01. 2216-01-70	1.000 EACH	.		.	
0230	213.0100 Finishing Roadway (project) 02. 2216-02-70	1.000 EACH	.		.	
0240	305.0110 Base Aggregate Dense 3/4-Inch	500.000 TON	.		.	
0250	305.0120 Base Aggregate Dense 1 1/4-Inch	18,000.000 TON	.		.	
0260	311.0110 Breaker Run	24,900.000 TON	.		.	
0270	371.1000.S QMP Base Aggregate Dense 1 1/4-Inch Compaction	18,000.000 TON	.		.	
0280	415.0080 Concrete Pavement 8-Inch	12,200.000 SY	.		.	
0290	415.0085 Concrete Pavement 8 1/2-Inch	11,300.000 SY	.		.	
0300	415.0210 Concrete Pavement Gaps	30.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0310	415.1085 Concrete Pavement HES 8 1/2-Inch	800.000 SY	.		.	
0320	415.1150.S Concrete Pavement Fast Track (inch) 01. 8-INCH	8,900.000 SY	.		.	
0330	416.0170 Concrete Driveway 7-Inch	1,000.000 SY	.		.	
0340	416.0270 Concrete Driveway HES 7-Inch	400.000 SY	.		.	
0350	416.0620 Drilled Dowel Bars	400.000 EACH	.		.	
0360	440.4410 Incentive IRI Ride	5,000.000 DOL	1.00000		5000.00	
0370	455.0605 Tack Coat	50.000 GAL	.		.	
0380	460.6424 HMA Pavement 4 MT 58-28 H	950.000 TON	.		.	
0390	465.0120 Asphaltic Surface Driveways and Field Entrances	600.000 TON	.		.	
0400	465.0125 Asphaltic Surface Temporary	600.000 TON	.		.	
0410	520.8000 Concrete Collars for Pipe	1.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0420	521.0112 Culvert Pipe Corrugated Steel 12-Inch	85.000 LF	.		.	
0430	521.0115 Culvert Pipe Corrugated Steel 15-Inch	300.000 LF	.		.	
0440	521.0118 Culvert Pipe Corrugated Steel 18-Inch	100.000 LF	.		.	
0450	521.0124 Culvert Pipe Corrugated Steel 24-Inch	110.000 LF	.		.	
0460	521.1012 Apron Endwalls for Culvert Pipe Steel 12-Inch	4.000 EACH	.		.	
0470	521.1015 Apron Endwalls for Culvert Pipe Steel 15-Inch	7.000 EACH	.		.	
0480	521.1018 Apron Endwalls for Culvert Pipe Steel 18-Inch	4.000 EACH	.		.	
0490	521.1024 Apron Endwalls for Culvert Pipe Steel 24-Inch	3.000 EACH	.		.	
0500	522.0118 Culvert Pipe Reinforced Concrete Class III 18-Inch	250.000 LF	.		.	
0510	522.1012 Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	8.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0520	522.1015 Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	1.000 EACH	.		.	
0530	522.1018 Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	5.000 EACH	.		.	
0540	522.1024 Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	2.000 EACH	.		.	
0550	522.1042 Apron Endwalls for Culvert Pipe Reinforced Concrete 42-Inch	1.000 EACH	.		.	
0560	601.0331 Concrete Curb & Gutter 31-Inch	14,700.000 LF	.		.	
0570	601.0511 Concrete Curb & Gutter Integral 6-Inch Sloped 36-Inch	240.000 LF	.		.	
0580	601.0600 Concrete Curb Pedestrian	600.000 LF	.		.	
0590	602.0410 Concrete Sidewalk 5-Inch	53,600.000 SF	.		.	
0600	602.0420 Concrete Sidewalk 7-Inch	13,200.000 SF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0610	602.0515 Curb Ramp Detectable Warning Field Natural Patina	440.000 SF	.		.	
0620	606.0200 Riprap Medium	30.000 CY	.		.	
0630	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	488.000 LF	.		.	
0640	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	453.000 LF	.		.	
0650	608.0324 Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	320.000 LF	.		.	
0660	608.0342 Storm Sewer Pipe Reinforced Concrete Class III 42-Inch	142.000 LF	.		.	
0670	608.0512 Storm Sewer Pipe Reinforced Concrete Class V 12-Inch	834.000 LF	.		.	
0680	611.0420 Reconstructing Manholes	8.000 EACH	.		.	
0690	611.1230 Catch Basins 2x3-FT	45.000 EACH	.		.	
0700	611.2004 Manholes 4-FT Diameter	2.000 EACH	.		.	
0710	611.2005 Manholes 5-FT Diameter	4.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0720	611.2006 Manholes 6-FT Diameter	1.000 EACH	.		.	
0730	611.2007 Manholes 7-FT Diameter	1.000 EACH	.		.	
0740	611.2504 Manholes Variable Tee 4-FT Diameter	1.000 EACH	.		.	
0750	611.3230 Inlets 2x3-FT	4.000 EACH	.		.	
0760	611.8110 Adjusting Manhole Covers	46.000 EACH	.		.	
0770	611.8115 Adjusting Inlet Covers	6.000 EACH	.		.	
0780	612.0106 Pipe Underdrain 6-Inch	250.000 LF	.		.	
0790	619.1000 Mobilization	1.000 EACH	.		.	
0800	620.0300 Concrete Median Sloped Nose	630.000 SF	.		.	
0810	623.0200 Dust Control Surface Treatment	36,500.000 SY	.		.	
0820	624.0100 Water	40.000 MGAL	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0830	625.0100 Topsoil	22,600.000 SY	.		.	
0840	627.0200 Mulching	15,000.000 SY	.		.	
0850	628.1504 Silt Fence	1,550.000 LF	.		.	
0860	628.1520 Silt Fence Maintenance	1,550.000 LF	.		.	
0870	628.1905 Mobilizations Erosion Control	10.000 EACH	.		.	
0880	628.1910 Mobilizations Emergency Erosion Control	10.000 EACH	.		.	
0890	628.2006 Erosion Mat Urban Class I Type A	600.000 SY	.		.	
0900	628.7010 Inlet Protection Type B	68.000 EACH	.		.	
0910	628.7015 Inlet Protection Type C	15.000 EACH	.		.	
0920	628.7504 Temporary Ditch Checks	310.000 LF	.		.	
0930	629.0205 Fertilizer Type A	13.000 CWT	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0940	630.0110 Seeding Mixture No. 10	180.000 LB	.		.	
0950	630.0200 Seeding Temporary	15.000 LB	.		.	
0960	631.0300 Sod Water	60.000 MGAL	.		.	
0970	631.1000 Sod Lawn	7,600.000 SY	.		.	
0980	632.0101 Trees (species) (size) (root) 01. JAPANESE TREE LILAC 'IVORY SILK'	3.000 EACH	.		.	
0990	632.0101 Trees (species) (size) (root) 02. CRIMSON SPIRE ENGLISH OAK	1.000 EACH	.		.	
1000	632.0101 Trees (species) (size) (root) 03. CALLERY PEAR	2.000 EACH	.		.	
1010	632.0101 Trees (species) (size) (root) 04. AUTUMN BLAZE MAPLE	2.000 EACH	.		.	
1020	632.0101 Trees (species) (size) (root) 05. CATALPA	1.000 EACH	.		.	
1030	632.0101 Trees (species) (size) (root) 06. AMUR CORK TREE	1.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1040	632.0101 Trees (species) (size) (root) 07. TULIP TREE	1.000 EACH	.		.	
1050	632.0101 Trees (species) (size) (root) 08. SWEET GUM TREE	1.000 EACH	.		.	
1060	632.0101 Trees (species) (size) (root) 09. BALD - CYPRESS	1.000 EACH	.		.	
1070	634.0805 Posts Tubular Steel 2x2-Inch X 5-FT	9.000 EACH	.		.	
1080	634.0810 Posts Tubular Steel 2x2-Inch X 10-FT	58.000 EACH	.		.	
1090	634.0812 Posts Tubular Steel 2x2-Inch X 12-FT	7.000 EACH	.		.	
1100	637.2210 Signs Type II Reflective H	193.670 SF	.		.	
1110	637.2230 Signs Type II Reflective F	268.030 SF	.		.	
1120	638.2602 Removing Signs Type II	50.000 EACH	.		.	
1130	638.3000 Removing Small Sign Supports	30.000 EACH	.		.	
1140	642.5401 Field Office Type D	1.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1150	643.0200 Traffic Control Surveillance and Maintenance (project) 01. 2216-01-70	316.000 DAY	.		.	
1160	643.0300 Traffic Control Drums	53,000.000 DAY	.		.	
1170	643.0420 Traffic Control Barricades Type III	10,600.000 DAY	.		.	
1180	643.0500 Traffic Control Flexible Tubular Marker Posts	111.000 EACH	.		.	
1190	643.0600 Traffic Control Flexible Tubular Marker Bases	111.000 EACH	.		.	
1200	643.0705 Traffic Control Warning Lights Type A	13,300.000 DAY	.		.	
1210	643.0715 Traffic Control Warning Lights Type C	13,700.000 DAY	.		.	
1220	643.0800 Traffic Control Arrow Boards	800.000 DAY	.		.	
1230	643.0900 Traffic Control Signs	26,600.000 DAY	.		.	
1240	643.1050 Traffic Control Signs PCMS	300.000 DAY	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1250	643.2000 Traffic Control Detour (project) 01. 2216-01-70	1.000 EACH	.		.	
1260	643.3000 Traffic Control Detour Signs	33,000.000 DAY	.		.	
1270	644.1420.S Temporary Pedestrian Surface Plywood	2,260.000 SF	.		.	
1280	644.1601.S Temporary Curb Ramp	18.000 EACH	.		.	
1290	644.1616.S Temporary Pedestrian Safety Fence	610.000 LF	.		.	
1300	645.0111 Geotextile Fabric Type DF Schedule A	250.000 SY	.		.	
1310	645.0120 Geotextile Fabric Type HR	60.000 SY	.		.	
1320	646.0600 Removing Pavement Markings	500.000 LF	.		.	
1330	647.0110 Pavement Marking Railroad Crossings Epoxy	4.000 EACH	.		.	
1340	647.0166 Pavement Marking Arrows Epoxy Type 2	10.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1350	647.0206 Pavement Marking Arrows Bike Lane Epoxy	13.000 EACH	.		.	
1360	647.0306 Pavement Marking Symbols Bike Lane Epoxy	13.000 EACH	.		.	
1370	647.0356 Pavement Marking Words Epoxy	9.000 EACH	.		.	
1380	647.0566 Pavement Marking Stop Line Epoxy 18-Inch	430.000 LF	.		.	
1390	647.0766 Pavement Marking Crosswalk Epoxy 6-Inch	1,460.000 LF	.		.	
1400	649.0400 Temporary Pavement Marking Removable Tape 4-Inch	25,500.000 LF	.		.	
1410	649.0402 Temporary Pavement Marking Paint 4-Inch	14,500.000 LF	.		.	
1420	649.0801 Temporary Pavement Marking Removable Tape 8-Inch	1,800.000 LF	.		.	
1430	649.1000 Temporary Pavement Marking Stop Line Removable Tape 12-Inch	300.000 LF	.		.	
1440	650.4000 Construction Staking Storm Sewer	100.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1450	650.4500 Construction Staking Subgrade	7,800.000 LF	.		.	
1460	650.5500 Construction Staking Curb Gutter and Curb & Gutter	700.000 LF	.		.	
1470	650.6000 Construction Staking Pipe Culverts	23.000 EACH	.		.	
1480	650.7000 Construction Staking Concrete Pavement	7,800.000 LF	.		.	
1490	650.8500 Construction Staking Electrical Installations (project) 01. 2216-01-70	LUMP	LUMP		.	
1500	650.8500 Construction Staking Electrical Installations (project) 02. 2216-02-70	LUMP	LUMP		.	
1510	650.9910 Construction Staking Supplemental Control (project) 01. 2216-01-70	LUMP	LUMP		.	
1520	650.9910 Construction Staking Supplemental Control (project) 02. 2216-02-70	LUMP	LUMP		.	
1530	650.9920 Construction Staking Slope Stakes	6,400.000 LF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1540	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	210.000 LF	.		.	
1550	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	690.000 LF	.		.	
1560	652.0615 Conduit Special 3-Inch	1,650.000 LF	.		.	
1570	654.0101 Concrete Bases Type 1	9.000 EACH	.		.	
1580	654.0110 Concrete Bases Type 10	5.000 EACH	.		.	
1590	655.0230 Cable Traffic Signal 5-14 AWG	1,450.000 LF	.		.	
1600	655.0240 Cable Traffic Signal 7-14 AWG	1,130.000 LF	.		.	
1610	655.0260 Cable Traffic Signal 12-14 AWG	1,660.000 LF	.		.	
1620	655.0270 Cable Traffic Signal 15-14 AWG	1,550.000 LF	.		.	
1630	655.0515 Electrical Wire Traffic Signals 10 AWG	3,240.000 LF	.		.	
1640	655.0900 Traffic Signal EVP Detector Cable	1,560.000 LF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1650	657.0100 Pedestal Bases	9.000				
	EACH		.		.	
1660	657.0425 Traffic Signal Standards Aluminum 15-FT	6.000				
	EACH		.		.	
1670	657.0430 Traffic Signal Standards Aluminum 10-FT	3.000				
	EACH		.		.	
1680	658.0110 Traffic Signal Face 3-12 Inch Vertical	40.000				
	EACH		.		.	
1690	658.0215 Backplates Signal Face 3 Section 12-Inch	40.000				
	EACH		.		.	
1700	658.0416 Pedestrian Signal Face 16-Inch	16.000				
	EACH		.		.	
1710	658.0600 Led Modules 12-Inch Red Ball	24.000				
	EACH		.		.	
1720	658.0605 Led Modules 12-Inch Yellow Ball	24.000				
	EACH		.		.	
1730	658.0610 Led Modules 12-Inch Green Ball	24.000				
	EACH		.		.	
1740	658.0615 Led Modules 12-Inch Red Arrow	16.000				
	EACH		.		.	
1750	658.0620 Led Modules 12-Inch Yellow Arrow	32.000				
	EACH		.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1760	658.0635 Led Modules Pedestrian Countdown Timer 16-Inch	16.000 EACH	.		.	
1770	658.5069 Signal Mounting Hardware (location) 01. W. MILL RD. & N. TEUTONIA AVE.	LUMP	LUMP		.	
1780	658.5069 Signal Mounting Hardware (location) 02. MILL RD & 43RD ST	LUMP	LUMP		.	
1790	690.0150 Sawing Asphalt	4,500.000 LF	.		.	
1800	690.0250 Sawing Concrete	5,600.000 LF	.		.	
1810	715.0415 Incentive Strength Concrete Pavement	5,000.000 DOL	1.00000		5000.00	
1820	ASP.1T0A On-the-Job Training Apprentice at \$5.00/HR	2,400.000 HRS	5.00000		12000.00	
1830	ASP.1T0G On-the-Job Training Graduate at \$5. 00/HR	1,400.000 HRS	5.00000		7000.00	
1840	SPV.0035 Special 01. BACKFILL SLURRY	200.000 CY	.		.	
1850	SPV.0060 Special 01. INLET COVERS TYPE 57	49.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1860	SPV.0060 Special 02. MANHOLE COVERS TYPE 58A	9.000 EACH	.		.	
1870	SPV.0060 Special 03. INTERNAL SANITARY MANHOLE SEAL	35.000 EACH	.		.	
1880	SPV.0060 Special 04. ADJUSTING WATER VALVE BOXES	28.000 EACH	.		.	
1890	SPV.0060 Special 05. ADJUSTING TES MANHOLE COVER	13.000 EACH	.		.	
1900	SPV.0060 Special 06. CLEANING DRAINAGE STRUCTURES	18.000 EACH	.		.	
1910	SPV.0060 Special 07. REMOVING LANDMARK REFERENCE MONUMENT	1.000 EACH	.		.	
1920	SPV.0060 Special 08. UTILITY LINE OPENING (ULO)	12.000 EACH	.		.	
1930	SPV.0060 Special 09. REMOVING HYDRANT	15.000 EACH	.		.	
1940	SPV.0060 Special 10. INSTALLING HYDRANT	11.000 EACH	.		.	
1950	SPV.0060 Special 11. PERMANENT DITCH CHECKS	2.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
1960	SPV.0060 Special 12. ELECTRICAL VAULT 17x30x18-INCH	23.000 EACH	.		.	
1970	SPV.0060 Special 13. CONCRETE BASES TYPE 10 MODIFIED	3.000 EACH	.		.	
1980	SPV.0060 Special 14. POLES TYPE 9	1.000 EACH	.		.	
1990	SPV.0060 Special 15. POLES TYPE 10	4.000 EACH	.		.	
2000	SPV.0060 Special 16. POLES TYPE 12 MODIFIED	3.000 EACH	.		.	
2010	SPV.0060 Special 17. MONOTUBE ARMS 25-FT	2.000 EACH	.		.	
2020	SPV.0060 Special 18. MONOTUBE ARMS 30-FT	3.000 EACH	.		.	
2030	SPV.0060 Special 19. MONOTUBE ARMS 35-FT MODIFIED	3.000 EACH	.		.	
2040	SPV.0060 Special 20. INSTALLING COUNDUIT INTO EXISTING MANHOLE	4.000 EACH	.		.	
2050	SPV.0060 Special 21. 4' DIAMETER MANHOLE TYPE TES	7.000 EACH	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2060	SPV.0060 Special 22. CONNECT ORIGINAL SERVICE (C.O.S.)	2.000 EACH	.		.	
2070	SPV.0060 Special 23. DISCONNECT SERVICE (D.S.)	1.000 EACH	.		.	
2080	SPV.0060 Special 24. ABANDON WATER MAIN 8-INCH	3.000 EACH	.		.	
2090	SPV.0060 Special 25. WATER MAIN PROTECTION	4.000 EACH	.		.	
2100	SPV.0090 Special 01. PAVEMENT MARKING GROOVED EPOXY 4-INCH	18,700.000 LF	.		.	
2110	SPV.0090 Special 02. PAVEMENT MARKING GROOVED EPOXY 8-INCH	1,100.000 LF	.		.	
2120	SPV.0090 Special 03. CONSTRUCTION STAKING CONCRETE SIDEWALK	11,000.000 LF	.		.	
2130	SPV.0090 Special 04. 5-DUCT CONDUIT CONCRETE ENCASED 4-INCH RIGID NONMETALLIC CONDUIT DB-60	70.000 LF	.		.	
2140	SPV.0090 Special 05. 4-DUCT CONDUIT CONCRETE ENCASED 4-INCH RIGID NONMETALLIC CONDUIT DB-60	3,100.000 LF	.		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2150	SPV.0090 Special 06. 2-DUCT CONDUIT CONCRETE ENCASED 4-INCH RIGID NONMETALLIC CONDUIT DB-60	80.000 LF	.		.	
2160	SPV.0090 Special 07. 1-DUCT CONDUIT CONCRETE ENCASED 4-INCH RIGID NONMETALLIC CONDUIT DB-60	100.000 LF	.		.	
2170	SPV.0090 Special 08. DUCTILE IRON WATER MAIN 8-INCH	219.000 LF	.		.	
2180	SPV.0090 Special 09. DUCTILE IRON WATER MAIN 12-INCH	18.000 LF	.		.	
2190	SPV.0090 Special 10. DUCTILE IRON WATER MAIN 16-INCH	78.000 LF	.		.	
2200	SPV.0090 Special 11. DUCTILE IRON HYDRANT BRANCH 6-INCH	176.000 LF	.		.	
2210	SPV.0105 Special 01. EMERGENCY VEHICLE PREEMPTION SYSTEM Project 2216-01-70	LUMP	LUMP		.	
2220	SPV.0105 Special 02. 18" STEEL CASING PIPE JACKED AND BORED	LUMP	LUMP		.	
2230	SPV.0105 Special 03. CONCRETE PAVEMENT JOINT LAYOUT	LUMP	LUMP		.	

SCHEDULE OF ITEMS

REVISED:

CONTRACT:
20160510018PROJECT(S):
2216-01-70
2216-02-70FEDERAL ID(S):
WISC 2016169
WISC 2016170

CONTRACTOR : _____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
2240	SPV.0105 Special 04. EMERGENCY VEHICLE PREEMPTION SYSTEM Project 2216-02-70	LUMP	LUMP			.
2250	SPV.0170 Special 01. TEST ROLLING	120.000 STA	.		.	
2260	SPV.0180 Special 01. GEOGRID REINFORCEMENT	500.000 SY	.		.	
2270	SPV.0195 Special 01. MANAGEMENT OF SOLID WASTE	17,600.000 TON	.		.	
	SECTION 0001 TOTAL				.	
	TOTAL BID				.	

PLEASE ATTACH SCHEDULE OF ITEMS HERE