HIGHWAY WORK PROPOSAL

Proposal Number: 3 7

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

COUNTY	STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	HIGHWAY
Bayfield	8160-14-71		Bayfield – Cornucopia, 7th St – Old CTH K	STH 13

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

Proposal Guaranty Required, $ 75,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: March 12, 2013 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code **SAMPLE** **NOT FOR BIDDING PURPOSES**
Contract Completion Time August 1, 2013	
Assigned Disadvantaged Business Enterprise Goal 0 %	This contract is exempt from federal oversight.

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

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

Subscribed and sworn to before me this date _____

(Signature, Notary Public, State of Wisconsin)

(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 Mill and overlay roadway, curb and gutter work, sidewalk replacement and addition, drainage structure maintenance and street lighting.	
Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH
PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

Effective with August 2007 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

(1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:

1. Electronic bid on the internet.
2. Electronic bid on a printout with accompanying diskette or CD ROM.
3. Paper bid under a waiver of the electronic submittal requirements.

(2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.

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

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

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

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

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

B Submitting Electronic Bids

B.1 On the Internet

(1) Do the following before submitting the bid:

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

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

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

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

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

(1) Download the latest schedule of items from the Wisconsin pages of the Bid Express™ web site reflecting the latest addenda posted on the department's web site at **http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm**. Use Expedite ™ software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express™ web site to assure that the schedule of items is prepared properly.

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

Bidder Name

BN00

Proposals: 1, 12, 14, & 22

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

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

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

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

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

C Waiver of Electronic Submittal

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

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

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

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

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

PROPOSAL BID BOND

Wisconsin Department of Transportation

DT1303 1/2006

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

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

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

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

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

PRINCIPAL

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

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

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

(Signature of Attorney-in-Fact)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

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

(Signature, Notary Public, State of Wisconsin)

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

(Date Commission Expires)

Notary Seal

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

CERTIFICATE OF ANNUAL BID BOND

Wisconsin Department of Transportation

DT1305 8/2003

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

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

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

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

(Signature of Authorized Contractor Representative) (Date)

FEBRUARY 1999

LIST OF SUBCONTRACTORS

Section 66.29(7), Wisconsin Statutes, provides that a bidder, as a part of his proposal, shall submit a list of the subcontractors he proposes to contract with and the class of work to be performed by each, provided that to qualify for such listing each subcontractor must first submit his bid in writing to the general contractor at least 48 hours prior to the time of bid closing. It further provides that a proposal of a bidder shall not be invalid if any subcontractor, and the class of work to be performed by such subcontractor, has been omitted from a proposal.

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

Name of Subcontractor	Class of Work	Estimated Value
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

DECEMBER 2000

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

Instructions for Certification

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Special Provisions

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 8160-14-71 Bayfield -- Cornucopia, 7th Avenue – Old CTH K, STH 13, Bayfield 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, 2013 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 (20120615)

2. Scope of Work.

The work under this contract shall consist of removing asphaltic surface milling, removing and replacing curb and gutter, removing and replacing concrete sidewalk, common excavation, placement of open graded base course, culvert maintenance, crushed aggregate shoulders, SMA and HMA pavements, removing and replacing permanent highway signing and posts, traffic control, erosion control, pavement marking 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.

Contractor must begin paving within ten calendar days of starting milling operations. Also see HMA Pavements article for additional pavement placement requirements.

Delete standard spec 105.5.1(5) and replace with the following:

Employ a competent superintendent capable of reading and understanding the contract and experienced in the type of work being performed. The superintendent shall be the authorized agent of the contractor and shall have full authority to execute the engineer's directions or instructions without delay. The superintendent shall coordinate all contractor operations related to the project including operations of both the prime contractor and/or any subcontractors and shall function as the single point of contact between the engineer and the contractor on all issues including issues involving both the prime contractor and/or any subcontractors. The superintendent shall be designated at the

preconstruction meeting. Notify the engineer in writing a minimum of 24 hours before replacing or changing the superintendent. The superintendent shall be on the project and accessible to the engineer and all project employees of both the prime contractor and any subcontractors during all hours of each work day.

Regarding paving, temporary pavement marking and same day pavement marking operations: The center joint of each layer of pavement must match the existing centerline of the highway. Temporary centerline pavement marking must be within 6" of the existing centerline of the highway. In constructing the surface layer of pavement, work on each side of the centerline must be matched up at the end of each day, so the permanent same day centerline pavement marking can be applied.

Within the boundaries of the Red Cliff Indian Reservation: Do not stage or park equipment, or store materials, or both, outside the highway right-of-way, unless prior permission from the Red Cliff Tribe has been obtained. All material source pits and waste pits used for these projects must be cleared for archeological concerns by having an archeological study completed and this work must be coordinated with the Red Cliff Tribe. If the contractor wishes to dispose of surplus or unsuitable material at a disposal site within the exterior boundaries of the Red Cliff Indian Reservation, regardless of property ownership, the contractor must first obtain approval, get any permits as applicable and get land-use conditions from the Red Cliff Natural Resource Department. The contractor shall contact Jeff Benton at (715) 779-3700 to start the process. The process includes the review of the proposed site by Red Cliff Natural Resource staff, so contact must be made far enough in advance to acceptably complete all requirements prior to using the disposal site.

Within the boundaries of the Red Cliff Indian Reservation: Before any earth disturbing activities begin, notify the Red Cliff Tribal Historic Preservation Officer (RC THPO) at least seven calendar days in advance of this work so a tribal monitor can be present to observe the activity. Activities include removal or installation of sign posts; replacement of culvert apron end walls; culvert cleaning; cleaning ditches; or any other ground disturbing work not included in the preceding list. Contact Larry Balber, RC THPO at (715) 779-3650 and notify the engineer that the contact has been made. In the event that there is no response within three working days, provide written notification to the Tribal Administration Office and the engineer two working days before the work is to be started and then begin as scheduled. A tribal monitor will be present to observe all earth disturbing activities within reservation boundaries, for work related to these projects, that he/she feels necessary. The monitor is given the authority to stop construction if they deem it is required.

In the event of inadvertent discovery of human remains, associated or unassociated funerary objects, the contractor shall immediately cease all ground disturbing activities in the area until a determination is made as to the significance of the find and the disposition determined. Contact the engineer and Larry Balber, RC THPO, at (715) 779-3650 immediately. Refer to NAGPRA regulations on Tribal lands in APE for more information.

At the beginning of the common excavation, curb and gutter removal and sidewalk removal operations between Broad Street and 1st Street, STH 13 (Rittenhouse Avenue) can be closed to through traffic. Reopen STH 13 (Rittenhouse Avenue) prior to 12:01 AM June 28, 2013. Do not reopen until completing the following work: Lower layers of pavement, new curb and gutter and new sidewalk are in place between Broad and 1st Street.

This contract includes an interim completion date. If the contractor fails to complete the work necessary to reopen STH 13 (Rittenhouse Avenue) to two-way traffic prior to 12:01 AM June 28, 2013, the department will assess the contractor $1,600 in interim liquidated damages for each calendar day contract work remains incomplete beyond 12:01 AM June 28, 2013. An entire calendar day will be charged for any period of time within a working day that the road remains closed beyond 12:01 AM.

The department will not grant time extensions to the interim completion dates specified above for the following:

1. Severe weather as specified in standard spec 108.10.2.2.
2. Labor disputes that are not industry wide.
3. Delays in material deliveries.

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.

Sensitive Work Zones

Areas of potential environmental, archeological, or historic significance have been identified along the project corridor outside of the roadway shoulder points.

Off-roadway locations utilized by the contractor and subcontractors for construction staging, material storage, equipment storage, and parking must be approved by the engineer at the pre-construction meeting or 10 days before the start of construction.

Regarding work between Stations 660+00 and 665+00: the engineer must be notified a minimum of 2 weeks prior to any earth disturbing work in this area to ensure an archeologist is present while work is being done. The archeologist must be present whenever earth disturbing activities are taking place within this range.

If items of environmental, archeological, or historic significance are encountered the contractor will stop work immediately. The engineer will be notified, Amy Adrihan at (715) 392-7972 will be contacted, and requirements will be followed according to standard spec 107.

Much of the City of Bayfield is a registered Historic District. Take care to protect all building faces from damage, dirt, and concrete. When working near the buildings, place a shield (plywood, sheeting, etc.) up against the building to protect it. The cost of this work is included in the bid item that is being worked on at the time. The contractor shall

responsible for returning the building face to its original condition if any damage occurs, or if any dirt or concrete is adhered to the building face.

Once the concrete sidewalks are poured, take extreme care to preserve the condition of the new concrete. Any sidewalk that is damaged shall be replaced at the contractor's expense.

Do not shut off utilities to businesses during business hours unless approved by the engineer.

Business Entrances
Some of the businesses located along STH 13 only have public access to their building off of the highway. Special accommodations will have to be made to maintain pedestrian access to these businesses during construction while the highway is closed to through traffic. Maintain pedestrian access at all times unless written permission is obtained from the owner 48 hours in advance of closing access or as directed after consulting with the engineer and City of Bayfield staff. Contact and ongoing coordination with these businesses can be done through the weekly business update meetings required with this highway contract.

Fish Spawning
There shall be no instream disturbance of Brickyard Creek, Chicago Creek or Red Cliff Creek as a result of construction activity under or for this contract, from September 15 to April 15 both dates inclusive, in order to avoid adverse impacts upon the spawning of trout and Coho Salmon.

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

Other environmental concerns.
Any dewatering required during construction shall be properly treated before it is allowed to enter any wetlands or surface waters. The contractor needs to specify the proposed dewatering management practices in the ECIP and construction dewatering needs to comply with the DNR technical standard 1061. For more information regarding dewatering standards, go to http://dnr.wi.gov/runoff/stormwater/techstds.htm.

In an effort to minimize the introduction and spread of non-invasive species to this area, only certified, weed-free mulch will be accepted for use.

Due to prolonged drought conditions, many lakes in this area are experiencing extremely low water levels. If the contractor needs to obtain water during construction of the project, the water cannot be legally withdrawn from the lakes. Water may be withdrawn from streams or creeks that cross a road or run adjacent to the right-of-way. The source and amount of water the contractor plans to withdraw must be stated in the ECIP.

General Provisions for Street Lighting.
The street lighting work required under project 8160-14-71 consists of removing existing street light bases, furnishing and installing new decorative lighting units, installing underground conduit and wiring, installing a lighting control cabinet and electrical service and installing a lighting control system.

For the purposes of this contract the primary point of contact for the City of Bayfield will be Tom Kovachevich, 125 South First Street P.O. Box 1170 Bayfield, WI 54814, (715) 779-5712, citypublicworks@cityofbayfield.com.

Other Contracts / Work by Others: In addition to work under project 8160-14-71, there will be additional street lighting work on Broad Street and Second Street under a separate project 8338-00-71. Work under project 8338-00-71 will include additional decorative lighting units and will be electrically connected to the system installed with project 8160-14-71.

Work by others to be coordinated with this project includes removal of the existing street lighting aerial cable, poles, arms and luminaires by Excel Energy. Removal of the existing concrete bases will be included in this contract. Coordinate removal of the existing street lighting as described in the following sections of this article.

Additional work by others includes removal and installation of street signs on light poles along Rittenhouse Avenue between First Street and Front Street; and installation of street name signs along the remainder of the project. The City of Bayfield will complete all sign removal and installation on the areas noted above.

Project Schedule: This project will require special attention to maintaining an aggressive schedule in order to complete work as required in the prosecution and progress article. Compile all material submittals within 2-weeks of contract award and provide to the engineer and City of Bayfield for review and approval. Approvals must be completed as early as possible to provide adequate lead time from material suppliers.

Staged Work: Perform all lighting removal and installation work in a manner that allows for the maintenance of lighting on the existing roadway. Coordinate with the utility and other work items in the contract to determine methods that allow for the existing street lights to operate during construction until work activities require its removal. Do not operate the new lighting system until all sections of the system are complete and approved by the engineer. The use of the new lighting system prior to final acceptance will not be allowed unless specifically approved by the engineer.

Special Requirements for Lighting Work: The City of Bayfield will confirm the location of all street lights, pull boxes and cabinets prior to installation. Work under this contract includes staking the locations in the field for review and approval. Stake all street lights, pull boxes and cabinets and request a meeting in the field with the engineer and the City of Bayfield. Confirm any adjustments from the plan locations prior to

construction. Adjusting one light location may require the modification of several adjacent lights to maintain an acceptable pattern.

Coordinate the location of the lighting control cabinet with the engineer, City of Bayfield and Excel Energy (electrical service). Placement of the lighting control cabinet will include locating protective bollards to shield the cabinet from vehicle traffic in the narrow alley way.

Special care will be required to maintain acceptable tolerances for locating street light bases and pull boxes within the terrace. The horizontal placement of the light bases within the terrace is critical to maintain adequate offset from parked cars and to provide clearance for disabled pedestrians. Setting the vertical grade of the light bases within the terrace is critical to avoid creating a tripping hazard. Engineer approval is required to make adjustments from what is shown on the plans.

The plans show multiple types of conduit installation used on the project. Modifying which conduit installation is used in certain locations may be warranted depending on field conditions. Any modification to conduit installation methods shall be approved by the engineer and the City of Bayfield prior to constructing.

There are several locations on the project where new light bases will impact private landscaping areas that abut the right-of-way. Take care to notify property owners prior to starting work and to minimize the impacts to the landscaped areas.

4. Traffic.

Keep STH 13 and intersection side roads open to two-way through traffic at all times, with the following exceptions:

Traffic may be restricted to a single lane within the area of construction operations during daylight hours utilizing flag persons as detailed on the plan. Supplement flaggers with a pilot vehicle to facilitate traffic flow through the area of construction operations for each lane restriction exceeding one mile in length. Each lane restriction shall not exceed one mile in length. No more than two single lane restrictions will be allowed on STH 13 at any one time and such restrictions shall be a minimum of one mile apart. The single lane restriction shall apply to any work performed on STH 13 and intersection roads under this contract.

Restrict the traveling public to a single lane within the area of construction operations during daylight hours, utilizing flaggers as detailed on the plan.

Multiple moving operations must be conducted in the same lane and same direction while maximum length of operations and minimum distance of separation are maintained.

Provide the engineer with a schedule of lane closures for the following week by noon on Thursday of the previous week. In addition, provide the following minimum advance notification to the engineer for incorporation into the Wisconsin Lane Closure System:

Lane closures	3 business days
Extended closure hours	14 calendar days

Notify the engineer and WisDOT Statewide Traffic Operations Center, (414) 227-2142, if there are any changes in the schedule, early completions, or cancellations of scheduled work.

Do not park equipment or place material within 18 feet of the edge of the shoulder unless approved by the engineer. Do not park or store equipment or material not being used during actual performance or work within 30 feet of the edge of the traveled way.

Keep all commercial, private and field driveway entrances accessible at all times, unless written permission is obtained from the property owner 48 hours in advance of closing the access or as directed after consulting the engineer and City of Bayfield staff.

Coordinate with local officials to post No Parking signs during applicable construction activities.

Regarding the coordination of work on STH 13 (Rittenhouse Avenue) between Broad and 1st Streets and the work on local City of Bayfield streets, Broad and 2nd Streets: While STH 13 is closed to through traffic and work is being done, Broad and 2nd Streets will and must remain open. At the end of each day, the contractor shall ensure the side street and alley intersections are open for cross traffic unless concrete, watermain or storm sewer work prevents it from safely being done. For the weekends, the contractor shall have the side street and alley intersections open for cross traffic unless work is being done there. Only when STH 13 has been reopened to traffic can Broad and 2nd Streets be closed.

5. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 13 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, May 24, 2013 to 6:00 AM Tuesday, May 28, 2013 for Memorial Day;
- From noon Wednesday, July 3, 2013 to 6:00 AM Monday, July 8, 2013 for Independence Day;
- From noon Friday, August 30, 2013 to 6:00 AM Tuesday, September 3, 2013 for Labor Day.

107-005 (20050502)

For each of the holiday periods listed above, the contractor is expected to plan his operations such that holiday traffic does not travel on a milled surface at any of these times.

6. Utilities.

This contract comes under the provision of Administrative Rule Trans 220.
107-065 (20080501)

The following utilities are located along STH 13. Some conflicts are anticipated as listed below. Caution when working around the utilities in the lighting replacement areas, the curb and gutter replacement areas, permanent highway signing work and culvert work is required.

City of Bayfield has water, sanitary sewer and storm sewer from 7th Street to N. Limits Road. Manholes and valves will be adjusted by the contractor during construction. The water main will be replaced from Broad Street to Front Street and is included in this project plan. Storm sewer will be constructed in various areas along STH 13 as part of the project.

The City of Bayfield anticipates conflicts with their sanitary sewer during the construction of the water and storm sewer construction. The city will coordinate the repair with the contractor during construction as part of their costs.

Bayfield Electric Cooperative has overhead and buried electric starting about 855+00 to the end of the project. Caution is required in the area of 868+00, left, where rip rap is to be installed to avoid conflict with the single phase underground wire in that location.

CenturyLink has buried or overhead crossings at approximately 621+80, 631+30, 634+75, 637+75, 644+75 and 660+00. From 660+00 it runs along STH 13 on the west side to the end of the project with several crossings to the west side. Although no conflicts are anticipated, if CenturyLink facilities need to be moved or adjusted, the contractor will need to contact CenturyLink 10 days prior to working near their facilities and give them 5 days to relocate their facility during construction.

Charter Communication has aerial crossings on Xcel poles at 643+75, 661+25, 694+80, 705+00, 744+75, 763+50, 779+60 and is aerial and some buried on the west side of STH 13 from 666+00 to 780+00. No conflicts are anticipated.

Norvado has fiber optics cable crossing at 644+00. No conflicts are anticipated.

Red Cliff Water and Sewer has sanitary sewer from approximately 753+00 to 860+00. The manholes in the pavement and curb and gutter will be worked around. Contractor will use caution near the sanitary line when replacing culvert
AEW's, cleaning culverts and placing riprap.

Red Cliff Water and Sewer has water main from 755+00 to 860+00. Valves in the pavement and curb and gutter will be worked around. Contractor will use caution near the water line when replacing culvert AEW's, cleaning culverts and placing riprap.

Xcel Energy has transmission crossing at Wilson St. no conflict is anticipated.

Xcel Energy has electric along STH 13. Poles at 610+80, 621+75, 623+75,624+90,629+50 and 634+75 will be worked around with caution. If support of the pole is required during construction, Xcel will need to be contacted 5 days prior. The pole at 626+95 may interfere with the new street lighting, it will be determined during construction if it needs to be removed. Contact Xcel 10 prior days to determine the conflict, Xcel will have 5 days to relocate. The existing street lighting from 632+65 to 643+50 will be removed by Xcel. New street lighting will be installed as part of this project. Xcel must be given a 10 prior notice when working near their facilities and if required to move or adjust their facilities they will have 5 days to perform their work.

Xcel Energy has gas crossings at the following approximate locations: Xcel will support the gas lines and have an inspector available. Xcel must be notified 10 working days prior to working near the gas facilities. If a gas line needs to be adjusted or moved Xcel will have 5 days to relocate.
621+80, support during construction.
625+10, no conflict anticipated.
631+30, no conflict anticipated.
634+65, gas crossing is 2" steel pipe and will remain in place. Use caution in this area when installing storm sewer and water.
637+75, needs to be supported during construction and caution when installing new lighting system
643+65, no conflict anticipated.

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

Both the department and the City of Bayfield personnel will inspect construction of sanitary sewer and water main under this contract. However, construction staking, testing, and final acceptance of the sanitary sewer and water main construction will be by the City of Bayfield.
105-001 (20061009)

8. Other Contracts.

The City of Bayfield plans to contract for a historic street renovation project under project 8338-00-71, which has work that will be in progress concurrently with the work under this contract. Some coordination of work is expected. See the Traffic article for expected coordination regarding street closures. See the Prosecution and Progress article for expected coordination regarding street lighting activities. In the event there is a disagreement or dispute between the contractor of this project and the contractor of the historic street renovation project, the WisDOT engineer will make the deciding determination.

9. Environmental Protection, Aquatic Exotic Species Control.

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

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

Ensure that all equipment that has been in contact with waters of the state, or with infested or potentially infested waters, has been decontaminated for aquatic plant materials and zebra mussels prior to being used in other waters of the state. Before using equipment on this project, thoroughly disinfect all equipment that has come into contact with potentially infested waters. Use the following inspection and removal procedures (guidelines from the Wisconsin Department of Natural Resources http://dnr.wi.gov//fish/documents/disinfection_protocols.pdf) for disinfection:

1. Prior to leaving the contaminated site, wash machinery and ensure that the machinery is free of all soil and other substances that could possibly contain exotic invasive species;
2. Drain all water from boats, trailers, bilges, live wells, coolers, bait buckets, engine compartments, and any other area where water may be trapped;
3. Inspect boat hulls, propellers, trailers and other surfaces. Scrape off any attached mussels, remove any aquatic plant materials (fragments, stems, leaves, seeds, or roots), and dispose of removed mussels and plant materials in a garbage can prior to leaving the area or invested waters; and
4. Disinfect your boat, equipment and gear by either:
    a. Washing with ~212º F water (steam clean), or
    b. Drying thoroughly for five days after cleaning with soap and water and/or high pressure water, or

c. Disinfecting with either 200 ppm (0.5 oz per gallon or 1 Tablespoon per gallon) Chlorine for 10-minute contact time or 1:100 solution (38 grams per gallon) of Virkon Aquatic for 20- to 30-minute contact time. Note: Virkon is not registered to kill zebra mussel veligers nor invertebrates like spiny water flea. Therefore this disinfect should be used in conjunction with a hot water (>104º F) application.

Complete the inspection and removal procedure before equipment is brought to the project site and before the equipment leaves the project site.
107-055 (20110615)

10. Notice to Contractor – Contamination.

No testing was completed for the project for locations with soil and ground water contamination within project limits. Records indicate that petroleum-contaminated soil may be present at the following location:

STH 13 Station 633+20 left of the centerline.

A record search conducted early in the development of the project indicated that underground tanks were once present at this location, but no record of it/them being removed or of any soil contamination could be located. If contaminated soils are present at this site, they are expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations at these locations to ensure that they do not extend beyond the excavation limits indicated in the plans. If contaminated soils are encountered at this site or elsewhere on the project during excavation, terminate excavation in the area and notify the engineer.

11. Coordination with Businesses.

The contractor shall arrange and conduct a meeting between the contractor, the department, local officials, business people and the contractor for the local street project to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting prior to the start of work under this contract and hold one meeting per week as long as STH 13 is closed to through traffic and the detour is in use.

12. Removing Asphaltic Surface Butt Joints.

This special provision describes removing asphaltic surface butt joints in accordance to the pertinent requirements of standard spec 204 and as hereinafter provided.

At the project ends and side roads: If butt joints are not milled transversely across the pavement, saw cuts will be required; the department will consider this work incidental to bid item 204.0115 “Removing Asphaltic Surface Butt Joints”.

13. Removing Concrete Sidewalk.

Supplement standard spec 204 with the following:

Removal of the concrete sidewalk where buildings abut the sidewalk shall include performing a full depth saw cut at the RW limit (30' from the center of the highway) or as close as possible to the face of the buildings. Construction permits have been obtained for locations where work off the highway RW onto private property will be allowed by the property owner. Contact the engineer for these locations. Remove any remaining pieces of sidewalk near buildings using other methods approved by the engineer. Payment of the full depth saw cut will be paid for under the bid item Sawing Concrete. During the saw cutting and sidewalk removal, take extreme care to not damage the buildings. The contractor will be responsible for any damage to a building. If any rebar extends into the sidewalk from the buildings, salvage it, taking care not to damage it, and incorporate into the new concrete sidewalk.

14. Excavation Common.

This work will be in accordance to standard spec 205 and as follows:

Some excavation may require the removal of brick pavers lying under the asphaltic surface. To remove the pavers to a clean edge, Sawing Pavement bid item has been added. See that article for further information regarding this work.

15. QMP Base Aggregate.

A Description

A.1 General

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

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

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

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

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

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

A.2 Contractor Testing for Small Quantities

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

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

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

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

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

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

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

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

B Materials

B.1 Quality Control Plan

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

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

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

B.2 Personnel

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

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

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

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

B.3 Laboratory

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

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

B.4 Quality Control Documentation

B.4.1 General

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

B.4.2 Records

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

B.4.3 Control Charts

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

(2) Provide control charts to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:

1. Contractor individual QC tests.
2. Department QV tests.
3. Department IA tests.
4. Four-point running average of the QC tests.

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

B.5 Contractor Testing

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

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

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

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

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

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

B.6 Test Methods

B.6.1 Gradation

(1) Test gradation using a washed analysis conforming to the following as modified in CMM 8.60:

Gradation..... AASHTO T 27
Material finer than the No. 200 sieve..... AASHTO T 11

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

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

1. Control limits are at the upper and lower specification limits.
2. There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.

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

B.6.2 Fracture

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

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

B.6.3 Liquid Limit and Plasticity

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

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

B.7 Corrective Action

B.7.1 General

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

B.7.2 Placement Corrective Action

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

(2) Notify the engineer whenever the running average exceeds a warning limit. When 2 consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:
   1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
   2. For fracture, increase the QC testing frequency to at least one test per gradation test.

(3) If corrective action improves the property in question such that the running average after 4 additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after 4 additional individual tests is

still in the warning band, repeat the steps outlined above starting with engineer notification.

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

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

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

B.8 Department Testing

B.8.1 General

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

B.8.2 Verification Testing

B.8.2.1 General

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

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

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

(3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting;

except, for 3-inch aggregates, the department will collect samples from the stockpile at load-out. The department will split each sample, test half for QV, and retain half.

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

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

B.8.3 Independent Assurance

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

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

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

B.9 Dispute Resolution

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

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

(3) If the project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product, the department will use third party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in

error will pay service charges incurred for testing by an independent laboratory. The department may use third party test results to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

C (Vacant)

D (Vacant)

E Payment

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

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

301-010 (20100709)

16. Pavement Safety Edge.

A Description

(1) This special provision describes providing a sloped safety edge at the locations the plans show for pavements and pavement overlays placed adjacent to aggregate shoulders. Conform to details within the plan.

(2) Department is conducting research on the safety edge. Cooperate with research activities as requested.

B (Vacant)

C Construction

C.1 General

(1) Construct the safety edge monolithically with the pavement extending beyond the edge of pavement. Prepare the foundation material underlying the extended safety edge as the engineer directs. Place the finished shoulder material to the top of the safety edge conforming standard spec 305.3.3.

C.2 Equipment

(1) For HMA pavement and overlays use a paver with an engineer-approved safety edge system capable of constructing the specified edge cross section compacted

conforming to standard spec 450.3.2.6. Do not use a single plate strike off. Before paving, provide documentation that the proposed system met these specifications on other projects or construct a test section. The engineer may allow a conforming test section to be incorporated into the work.

(2) For concrete pavement and overlays use slip-form paver modified to form the required edge.

(3) The engineer may allow hand placement for short sections where machine placement is not practicable. The engineer may also allow full depth sawing to remove formed edges integrally placed with pavement where the plans do not show safety edge.

(4) The engineer may eliminate safety edge work from the contract if at any point the contractor fails to construct conforming work.

D Measurement

(1) The department will include the tonnage of material acceptably placed in the edge in the tonnage for the associated HMA pavement or overlay bid items.

(2) The department will include the plan-view area of material acceptably placed in the edge in the yardage of the associated concrete pavement bid items.

E Payment

(1) Payment for providing safety edge as well as full depth sawing to remove integrally placed edge is incidental to the associated pavement or overlay bid items.

(2) The department will make no compensation under standard spec 109.5 if the safety edge work is eliminated due to the contractor's failure to produce conforming work.

17. HMA Pavements.

For pavements (both E-3 and SMA-Special surface layer areas) within the 3.5” mill and overlay areas, the leveling layer shall be placed within 48 hours after milling.

For pavement with an E-3 surface layer, all elevation differences between the adjacent through lanes in milled areas must be evened up by noon every Friday.

For pavement with an SMA-Special surface layer, all elevation differences between the adjacent through lanes must be evened up by the end of each day. This applies to the leveling layer of pavement only.

For the HMA Pavement Type E-3 from Station 632+60 to 639+82, standard spec 460.2.2.3 is modified to allow the contractor to use either 12.5 mm or 19 mm mix for the lower layer.

18. QMP HMA Pavement Nuclear Density.

A Description

Replace standard spec 460.3.3.2 (1) and standard spec 460.3.3.2 (4) with the following:

(1) This special provision describes density testing of in-place HMA pavement with the use of nuclear density gauges. Conform to standard spec 460 as modified in this special provision.

(2) Provide and maintain a quality control program defined as all activities and documentation of the following:
1. Selection of test sites.
2. Testing.
3. Necessary adjustments in the process.
4. Process control inspection.

(3) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required procedures. Obtain the CMM from the department's web site at:
http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm

(4) The department's Materials Reporting System (MRS) software allows contractors to submit data to the department electronically, estimate pay adjustments, and print selected reports. Qualified personnel may obtain MRS software from the department's web site at:
http://www.atwoodsystems.com/mrs

B Materials

B.1 Personnel

(1) Perform HMA pavement density (QC, QV) testing using a HTCP certified nuclear technician I, or a nuclear assistant certified technician (ACT-NUC) working under a certified technician.

(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.

B.2 Testing

(1) Conform to ASTM D2950 and CMM 8.15 for density testing and gauge monitoring methods. Perform nuclear gauge measurements using gamma radiation in the backscatter position. Perform each test for 4 minutes of nuclear gauge count time.

B.3 Equipment

B.3.1 General

(1) Furnish nuclear gauges from the department's approved product list at http://www.dot.wisconsin.gov/business/engrserv/approvedprod.htm.

(2) Have the gauge calibrated by the manufacturer or an approved calibration service within 12 months of its use on the project. Retain a copy of the manufacturer's calibration certificate with the gauge.

(3) Prior to each construction season, and following any calibration of the gauge, the contractor must perform calibration verification for each gauge using the reference blocks located in the department's central office materials laboratory. To obtain information or schedule a time to perform calibration verification, contact the department's Radiation Safety Officer at:

Materials Management Section
3502 Kinsman Blvd.
Madison, Wisconsin 53704
Telephone: (608) 243-5998

B.3.2 Correlation of Nuclear Gauges

B.3.2.1 Correlation of QC and QV Nuclear Gauges

(1) Select a representative section of the compacted pavement prior to or on the first day of paving for the correlation process. The section does not have to be the same mix design.

(2) Correlate the 2 or more gauges used for density measurement (QC, QV). The QC and QV gauge operators will perform the correlation on 5 test sites jointly located. Record each density measurement of each test site for the QC, QV and back up gauges.

(3) Calculate the average of the difference in density of the 5 test sites between the QC and QV gauges. Locate an additional 5 test sites if the average difference exceeds 1.0 lb/ft^3. Measure and record the density on the 5 additional test sites for each gauge.

(4) Calculate the average of the difference in density of the 10 test sites between the QC and QV gauges. Replace one or both gauges if the average difference of the 10 tests exceeds 1.0 lb/ft^3 and repeat correlation process from B.3.2.1 (2).

(5) Furnish one of the QC gauges passing the allowable correlation tolerances to perform density testing on the project.

B.3.2.2 Correlation Monitoring

(1) After performing the gauge correlation specified in B.3.2.1, establish a project reference site approved by the department. Clearly mark a flat surface of concrete or asphalt or other material that will not be disturbed during the duration of the project. Perform correlation monitoring of the QC, QV, and all back-up gauges at the project reference site.

(2) Conduct an initial 10 density tests with each gauge on the project reference site and calculate the average value for each gauge to establish the gauge's reference value. Use the gauge's reference value as a control to monitor the calibration of the gauge for the duration of the project.

(3) Check each gauge on the project reference site a minimum of one test per day if paving on the project. Calculate the difference between the gauge's daily test result and its reference value. Investigate if a daily test result is not within 1.5 lb/ft^3 of its reference value. Conduct 5 additional tests at the reference site once the cause of deviation is corrected. Calculate and record the average of the 5 additional tests. Remove the gauge from the project if the 5-test average is not within 1.5 lb/ft^3 of its reference value established in B.3.2.2(2).

(4) Maintain the reference site test data for each gauge at an agreed location.

B.4 Quality Control Testing and Documentation

B.4.1 Lot and Sublot Requirements

B.4.1.1 Mainline Traffic Lanes, Shoulders, and Appurtenances

(1) A lot consists of the tonnage placed each day for each layer and target density specified in standard spec 460.3.3.1. A lot may include partial sublots.

(2) Divide the roadway into sublots. A sublot is 1500 lane feet for each layer and target density.

(3) A sublot may include HMA placed on more than one day of paving. Test sublots at the pre-determined random locations regardless of when the HMA is placed. No additional testing is required for partial sublots at the beginning or end of a day's paving.

(4) If a resulting partial quantity at the end of the project is less than 750 lane feet, include that partial quantity with the last full sublot of the lane. If a resulting partial quantity at the end of the project is 750 lane feet or more, create a separate sublot for that partial quantity.

(5) Randomly select test locations for each sublot as specified in CMM 8.15 prior to paving and provide a copy to the engineer. Locate and mark QC density test sites when performing the tests. Perform density tests prior to opening the roadway to traffic.

(6) Use Table 1 to determine the number of tests required at each station, depending on the width of the lane being tested. When more than one test is required at a station, offset the tests 10 feet longitudinally from one another to form a diagonal testing row across the lane.

Lane Width	No. of Tests	Transverse Location
5 ft or less	1	Random
Greater than 5 ft to 9 ft	2	Random within 2 equal widths
Greater than 9 ft	3	Random within 3 equal widths

Table 1

B.4.1.2 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts

(1) A lot represents a combination of the total daily tonnage for each layer and target density.

(2) Each side road, crossover, turn lane, ramp, and roundabout must contain at least one sublot for each layer.

(3) If a side road, crossover, turn lane, or ramp is 1500 feet or longer, determine sublots and random test locations as specified in B.4.1.1.

(4) If a side road, crossover, turn lane, or ramp is less than 1500 feet long, determine sublots using a maximum of 750 tons per sublot and perform the number of random tests as specified in Table 2.

Side Roads, Turn Lanes, Crossovers, Ramps, Roundabouts: Sublot/Layer tonnage	Minimum Number of Tests Required
25 to 100 tons	1
101 to 250 tons	3
251 to 500 tons	5
501 to 750 tons	7

Table 2

B.4.2 Pavement Density Determination

B.4.2.1 Mainline Traffic Lanes and Appurtenances

(1) Calculate the average sublot densities using the individual test results in each sublot.

(2) If all sublot averages are no more than one percent below the target density, calculate the daily lot density by averaging the results of each random QC test taken on that day's material.

(3) If any sublot average is more than one percent below the target density, do not include the individual test results from that sublot when computing the lot average density and remove that sublot's tonnage from the daily quantity for incentive. The tonnage from any such sublot is subject to disincentive pay according to standard spec 460.5.2.2.

B.4.2.2 Mainline Shoulders

B.4.2.2.1 Width Greater Than 5 Feet

(1) Determine the pavement density as specified in B.4.2.1.

B.4.2.2.2 Width of 5 Feet or Less

(1) If all sublot test results are no more than 3.0 percent below the minimum target density, calculate the daily lot density by averaging all individual test results for the day.

(2) If a sublot test result is more than 3.0 percent below the target density, the engineer may require the unacceptable material to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine the limits of the unacceptable material according to B.4.3.

B.4.2.3 Side Roads, Crossovers, Turn Lanes, Ramps, and Roundabouts

(1) Determine the pavement density as specified in B.4.2.1.

B.4.2.4 Documentation

(1) Document QC density test data as specified in CMM 8.15. Provide the engineer with the data for each lot within 24 hours of completing the QC testing for the lot.

B.4.3 Corrective Action

(1) Notify the engineer immediately when an individual test is more than 3.0 percent below the specified minimum in standard spec 460.3.3.1. Investigate and determine the cause of the unacceptable test result.

(2) The engineer may require unacceptable material specified in B.4.3(1) to be removed and replaced with acceptable material or allow the nonconforming material to remain in place with a 50 percent pay reduction. Determine limits of the unacceptable area by measuring density of the layer at 50-foot increments both ahead and behind the point of unacceptable density and at the same offset as the original test site. Continue testing at 50-foot increments until a point of acceptable density is found as specified in standard spec 460.5.2.2(1). Removal and replacement of material may be required if extended testing is in a previously accepted sublot. Testing in a previously accepted sublot will not be used to recalculate a new lot density.

(3) Compute unacceptable pavement area using the product of the longitudinal limits of the unacceptable density and the full sublot width within the traffic lanes or shoulders.

(4) Retesting and acceptance of replaced pavement will be according to standard spec 105.3.

(5) Tests indicating density more than 3.0 percent below the specified minimum, and further tests taken to determine the limits of unacceptable area, are excluded from the computations of the sublot and lot densities.

(6) If 2 consecutive sublot averages within the same paving pass and same target density are more than one percent below the specified target density, notify the engineer and

take necessary corrective action. Document the locations of such sublots and the corrective action that was taken.

B.5 Department Testing

B.5.1 Verification Testing

(1) The department will have a HTCP certified technician, or ACT working under a certified technician, perform verification testing. The department will test randomly at locations independent of the contractor's QC work. The department will perform verification testing at a minimum frequency of 10 percent of the sublots and a minimum of one sublot per mix design. The sublots selected will be within the active work zone. The contractor will supply the necessary traffic control for the department's testing activities.

(2) The QV tester will test each selected sublot using the same testing requirements and frequencies as the QC tester.

(3) If the verification sublot average is not more than one percent below the specified minimum target density, use the QC tests for acceptance.

(4) If the verification sublot average is more than one percent below the specified target density, compare the QC and QV sublot averages. If the QV sublot average is within 1.0 lb/ft^3 of the QC sublot average, use the QC tests for acceptance.

(5) If the first QV/QC sublot average comparison shows a difference of more than 1.0 lb/ft^3 each tester will perform an additional set of tests within that sublot. Combine the additional tests with the original set of tests to compute a new sublot average for each tester. If the new QV and QC sublot averages compare to within 1.0 lb/ft^3, use the original QC tests for acceptance.

(6) If the QV and QC sublot averages differ by more than 1.0 lb/ft^3 after a second set of tests, resolve the difference with dispute resolution specified in B.6. The engineer will notify the contractor immediately when density deficiencies or testing precision exceeding the allowable differences are observed.

B.5.2 Independent Assurance Testing

(1) Independent assurance is unbiased testing the department performs to evaluate the department's verification and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform the independent assurance review according to the department's independent assurance program.

B.6 Dispute Resolution

(1) The testers may perform investigation in the work zone by analyzing the testing, calculation, and documentation procedures. The testers may perform gauge correlation according to B.3.2.1.

(2) The testers may use correlation monitoring according to B.3.2.2 to determine if one of the gauges is out of tolerance. If a gauge is found to be out of tolerance with its reference value, remove the gauge from the project and use the other gauge's test results for acceptance.

(3) If the testing discrepancy cannot be identified, the contractor may elect to accept the QV sublot density test results or retesting of the sublot in dispute within 48 hours of paving. Traffic control costs will be split between the department and the contractor.

(4) If investigation finds that both gauges are in error, the contractor and engineer will reach a decision on resolution through mutual agreement.

B.7 Acceptance

(1) The department will not accept QMP HMA Pavement Nuclear Density if a non-correlated gauge is used for contractor QC tests.

C (Vacant)

D (Vacant)

E Payment

E.1 QMP Testing

(1) Costs for all sampling, testing, and documentation required under this special provision are incidental to the 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.

E.2 Disincentive for HMA Pavement Density

(1) The department will administer density disincentives according to standard spec 460.5.2.2.

E.3 Incentive for HMA Pavement Density

(1) Delete standard spec 460.5.2.3.

(2) If the lot density is greater than the minimum specified in standard spec table 460-3 and all individual air voids test results for that mixture are within +1.0 percent or -0.5 percent of the design target in standard spec table 460-2, the department will adjust pay for that lot as follows:

Percent Lot Density Above Minimum	Pay Adjustment Per Ton
From -0.4 to 1.0 inclusive	$0
From 1.1 to 1.8 inclusive	$0.40
More than 1.8	$0.80

(3) The department will adjust pay under the Incentive Density HMA Pavement bid item. Adjustment under this item is not limited, either up or down, to the bid amount shown on the schedule of items.

(4) If a traffic lane meets the requirements for disincentive, the department will not pay incentive on the integrally paved shoulder.

(5) Submit density results to the department electronically using the MRS software. The department will validate all contractor data before determining pay adjustments.

460-020 (20100709)

19. Riprap.

This special provision describes work required for the placement of all types of riprap in accordance to the pertinent requirements of standard spec 606 and as hereinafter provided.

Rounded stone is not acceptable for use. All types of riprap pieces must be angular.

Waste concrete cannot be used as riprap unless it is completely covered with natural rock. All protruding rebar must be sawed off level with the concrete.

20. Adjusting Manhole Covers.

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

Revise standard spec 611.3.7 by deleting the last paragraph.

Set the manhole frames so that they comply with the surface requirements of standard spec 450.3.2.9. At the completion of the paving, a 6-foot straightedge shall be placed over the centerline of each manhole frame parallel to the direction of traffic. A measurement shall be made at each side of the frame. The two measurements shall be averaged. If this average is greater than 5/8 inches, reset the manhole frame to the correct plane and elevation. If this average is 5/8 inches or less but greater than 3/8 inches, the manhole frame shall be allowed to remain in place but shall be paid for at 50 percent of the contract unit price.

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

611-005 (20030820)

21. Removing Signs Type II.

This work shall be in accordance to the pertinent requirements of standard spec 638 and as provided here.

Type II aluminum signs are the department's property. Return aluminum signs to the Northwest Region sign shop palletized for handling with a forklift. Northwest Spooner Sign Shop Coordinator Vicki Riepl shall be notified at (715) 635-4962 at least 3 business days prior to delivery to coordinate shipment to be delivered to the Northwest Region Spooner Sign Shop at:

Junction 253 and 63
Greenvalley Rd.
Spooner WI, 54801

22. Locating No-Passing Zones, Item 648.0100.

For this project, the spotting sight distance in areas with a 55 mph posted speed limit is 0.21 miles (1108 feet).
648-005 (20060512)

23. General Requirements for Electrical Work.

Amend standard spec 651.2, Materials, by adding the following paragraph:

(7) The approved products list is located at:
http://www.dot.wisconsin.gov/business/engrserv/docs/ap2/electrical.pdf.

24. Electrical Service Meter Breaker Pedestal (637+70), Item 656.0200.01.

A Description
This work shall be in accordance to the requirements of standard spec 656, the plans, standard detail drawings, and as hereinafter provided.

B Materials
Amend standard spec 656.2.3, Meter Breaker Pedestal Service, paragraph (1) to read as follows:

(1) Furnish an approved service having a meter breaker pedestal, 22,000-AIC circuit breakers unless the local utility requires otherwise, grounding electrodes and connections, conduit and fittings, and all necessary conductors and equipment required by the WSEC and the utility for a service connection. When the meter breaker pedestal is energized, install an approved meter seal at all access points on the meter trough. Meter shall be time of use type.

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

(2) Furnish meter pedestal with a painted finish. Paint meter pedestal using an epoxy primer and topcoat to match the lighting control cabinet finish.

C Construction

Amend standard spec 656.3.2, Service Lateral, paragraph (1) to read as follows:

1. (1) The local utility shall furnish and install a 200 A, 120/240 volt AC, single phase, 3-wire underground electrical service lateral. Arrange and assume responsibility for the timely installation of the service lateral by the utility. The lateral shall be terminated at a meter pedestal as the plans show.

   Submit the application to the utility for all required electrical services. Pay the utility installation costs promptly and seek reimbursement through the "Electrical Service Lateral" administrative contract bid item.

   Arrange for future monthly energy usage billing to be established in the name of the appropriate entity. Contact the City of Bayfield for this information.

   Ensure that electrical service is installed and energized a minimum of one week prior to the lighting system activation deadline.

D Measurement

The department will measure the Electrical Service Meter Breaker Pedestal bid item as a single lump sum for each service, acceptably completed.

E Payment

In accordance to the plans and standard spec 656.5.

25. Seismograph, Item 999.1000.S.

A Description

This special provision describes furnishing a seismograph and employing trained operators to continuously monitor building vibration.

B Material

Use seismographs that are in accordance to ILHR 7.63, and are continuous strip recorders supplied with all the accessories necessary for making seismographic observations.

C Construction

Monitoring procedures shall be in accordance to ILHR 7.64 and the following: Take seismograph readings prior to construction activities to establish an ambient index.

Place the seismograph to continuously monitor all construction activities or as directed by the engineer. If construction activities generate ground vibration in excess of the Peak Particle Velocity Limits as shown in ILHR 7.64, stop the construction operation in progress and consider and implement alternate construction methods.

D Measurement

The department will measure Seismograph as a single complete unit of work.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
999.1000.S	Seismograph	LS

Payment is full compensation for furnishing and operating a seismograph, an operator, and accessories.

999-005 (20030820)

Use of this item "Seismograph" is for the protection of historic buildings and structures in the areas where subsurface work is being done directly adjacent to building foundations, structures or very near to buildings. The intended range is from Station 632+60 to Station 639+82.

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

A Description

This special provision describes conducting a crack and damage survey of the residences and business located between Stations 623+50 and 651+50.

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

B (Vacant)

C Construction

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

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

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

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

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

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

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

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

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

Payment is full compensation for providing the before and after written reports, and for photographs or videotapes.
999-010 (20030820)

The use of this bid item "Crack and Damage Survey" is to document the condition of the structures that are directly adjacent to construction activities such as sidewalk or curb and gutter removal and replacement and street lighting removals and replacements. The survey should include any buildings of historical significance within the limits listed, others as necessary and the retaining wall at Station 650+00 to 651+35 left.

27. Conduit Bedding Material, Item SPV.0035.01.

A Description
This special provision describes furnishing and installing material suitable for conduit bedding as shown on the plans and as hereinafter provided.

B Materials
Provide materials suitable for conduit bedding. Material shall be well drained and must pass a 1-inch sieve.

C Construction
Install material in accordance to standard spec 652.3.1.2. "Installing Underground".

D Measurement
The department will measure Conduit Bedding Material in volume by the cubic yard placed in the trench, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.01	Conduit Bedding Material	CY

Payment is full compensation for furnishing, placing and compacting material.

28. Water Main Gate Valve and Valve Box 8-Inch, Item SPV.0060.01.

A Description

Furnish and install gate valves and valve boxes as hereinafter provided.

B Materials

The following valves shall be used on the Project:

Valve Applications	Type
Water Main ≤12 inches	Resilient Wedge Gate Valves

Resilient wedge gate valves shall conform to AWWA C500 and C509, respectively. Valves shall close clockwise.

Valve stem seals shall be O-rings. The compound shall be of Buna N or NBR rubber and have a durometer hardness of 70° when tested in accordance to ASTM D2240.

Markings shall be cast on the bonnet or body of each valve and shall show the manufacturer's name or mark, the year and location valve casting was made, the size of the valve, and the designation of working water pressure.

Valves on water distribution systems and force main shall be suitable for direct burial, be provided with nonrising stems, and be equipped with a standard 2-inch square operating nut with cast-on directional arrow.

Gate valves shall be by Mueller, American Flow Control, Kennedy, or equal.

Valve boxes shall be made of cast iron conforming to ASTM A48, Class 20. The castings shall be free from blowholes, porosity, hard spots, shrinkage defects or cracks, or other injurious defects and shall have a normal smooth casting finish. The castings shall be thoroughly coated with a 1-mil minimum thickness bituminous coating. Valve boxes shall be 5 1/4 inches in diameter. Valve boxes shall have a maximum length of 7 feet when extended without extension sections. Extensions shall be provided for deeper mains.

Valve boxes shall consist of a base section, tubular mid and top sections, both with cast threads by which one can be telescoped on the other, extension sections if required, and a circular drop cover.

C Construction
All gate valves and valve boxes shall be constructed at locations shown on the Drawings.

A valve box shall be provided for valves in the main. The valve box shall be centered and plumb over the wrench nut of the valve with the box cover flush with the finished ground elevation. Solid 4-inch concrete blocks shall be placed under the base of valve boxes so that the bottom of the base is about 2 inches away from contact with the valve bonnet. The valve box shall not transmit shock or stress to the valve.

D Measurement
The department will measure Water Main Gate Valve and Valve Box (8-Inch) 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.0060.01	Water Main Gate Valve and Valve Box 8-Inch	Each

Payment is full compensation for furnishing all materials, including gate valve, valve box, valve support, water main connections, and other fittings; for furnishing all excavation, backfilling, disposal of surplus material, cleanup, and restoring site of work, and for furnishing all labor, tools, equipment, and incidentals necessary for completing the contract work.

29. Salvage Existing Gate Valve, Item SPV.0060.02.

A Description
Remove existing gate valve and deliver to the City of Bayfield. Location of delivery shall be coordinated during construction by engineer and City of Bayfield staff.

B (Vacant)

C Construction
Excavate around the existing gate, cut existing water main, drain and/or pump any water from the excavation, and remove existing gate valve.

Care should be taken to ensure that the gate valve is not damaged during the removal process, including damage to any coatings on the gate valve.

D Measurement
The department will measure Salvage Existing Gate Valve as each individual unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Salvage Existing Gate Valve	Each

Payment is full compensation for furnishing all excavation, backfilling, disposal of surplus materials, and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

30. Adjusting Water Valve Box, Item SPV.0060.03.

A Description
Adjust, protect, and maintain accessibility, for the duration of the project, to water valve boxes located within the project limits.

B (Vacant)

C Construction
Adjust all water valve boxes to proposed elevations at locations shown on the plans.

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

D Measurement
The department will measure Adjusting Water Valve Box as each individual unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Adjusting Water Valve Box	Each

Payment is full compensation for furnishing all excavation, backfilling, disposal of surplus materials, water box clean-out, and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

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

31. Decorative Light Unit, Item SPV.0060.04.

A Description
This special provision describes furnishing and installing decorative street lighting units at the locations shown in the plan.

B Materials

B.1 Material Qualifications

Furnish a complete list of documentation in accordance to standard spec 651.2 and the following requirements. Furnish the following list of documentation detailing the characteristics of the decorative light units:

- Engineer's verification showing the light pole and concrete foundation design criteria.
- Graphical depiction showing verification of the light unit arrangement and all accessories (receptacles, flower basket hanger, eyelets, signs, handhole) are in the correct orientation.
- Light pole sample section for color and finish verification.
- Paint finish durability information.
- Illumination modeling results and luminaire test files (.ies format) for design standards verification.
- Cut sheets, warranty information and parts list for all equipment.
- Luminaire data including: optical design features, backlight/uplight/glare control, heat dissipation, energy usage, color spectrum, maintenance features.
- Demonstrate ability to supply replacement parts and matching assemblies in the future.

The information required in the above list must be furnished to the engineer after letting. The engineer will not approve any materials prior to bid letting. Do not order materials until the engineer approves the list. Prepare one additional copy of all submittals to send to the City of Bayfield.

B.2 Concrete Foundation

Furnish concrete masonry, bar steel reinforcement, anchor rods, nuts, washers, conduit, grounding electrode and all incidental materials in accordance to the pertinent provisions in standard spec 654.2.

B.3 Pole

Furnish light poles as shown on the plans and as hereinafter provided. The light pole shall conform to the following requirements:

1. Poles shall consist of steel composition of sufficient strength to accommodate the loading parameters as shown on the plans.
2. Poles shall have a tapered, fluted cross section with a decorative base section.
3. Decorative base section shall be integral to the pole, "clam-shell" type will not be accepted.
4. Poles shall have dimensional characteristics as shown on the plans.
5. Handhole access door required within the decorative base section and grounding lug; factory welded to the pole interior, opposite from the access door.
6. Pole shall provide accommodations for receptacles, eyelets and basket hangers.
7. Pole finish with polyester powder coat black; finish shall pass 1,000 hour salt fog test per ASTM B117.
8. Furnish galvanized L-type anchor rods.

B.3 Luminaire

Furnish luminaires as shown on the plans and as hereinafter provided. The luminaire shall conform to the following requirements:

1. Luminaire shall be traditional shaped acorn style with prismatic glass refractor/reflector; glass optic shall be 14" diameter (approximate).
2. Both IES distributions Type II and III are acceptable if the luminaire can meet all other requirements.
3. LED light source with 4,000K (+/- 15%) color temperature maximum; 3,000K is also acceptable and preferred.
4. Luminaire shall provide approximately 4,000 lumens while operating at a maximum 60 watts. Lumen output is secondary to the ability to provide illumination levels in conformance to the criteria in this article.
5. Luminaire shall provide illumination performance as follows:
    - Average foot-candles.
    - 3.0:1 average-minimum illumination ratio.
    - 0.3:1 veiling luminance ratio or best achievable.
    - These parameters shall be considered maximum values not to be exceeded.
6. Illumination results shall be based on the roadway section as shown in the plans; and the average spacing as shown in the plans.
7. Luminaire ratings shall includes the following:
    - B.U.G. (Backlight / Uplight / Glare) rating of 2-3-4 or better.
    - I.P. rating of 65 or greater.
    - All components U.L. listed for wet locations.
8. Luminaire shall feature the following accessories:
    - Spike top finial.
    - Opaque top cover.
    - Internal house side shield (furnish only).

C Construction

Install Decorative Street Light unit in accordance to the pertinent provisions of standard spec 657 and 659, the plans and as the manufacturer directs.

D Measurement

The department will measure Decorative Light Unit, as each individual unit, acceptably completed.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.04	Decorative Light Unit	Each

Payment is full compensation for furnishing all materials; and for installing a complete street lighting unit.

32. Light Pole Receptacle, Item SPV.0060.05.

A Description
This special provision describes furnishing and installing a GFCI receptacle integral to the decorative light pole; complete with housing, receptacle, in-use cover and wiring assembled.

B Materials
Furnish a reinforced receptacle housing within the light pole, a weather resistant flush receptacle box and heavy duty while-in-use cover. Furnish a 20A/125V GFCI receptacle and wiring connections. While-in-use cover shall be metal fabrication and black in color to match the pole finish.

C Construction
Install receptacle unit in accordance to the pertinent provisions of standard spec 659 and as the manufacturer directs.

D Measurement
The department will measure Light Pole Receptacle as each individual unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Light Pole Receptacle	Each

Payment is full compensation for providing and installing all materials including fittings, hardware and incidentals; as required to provide a complete and functioning unit.

This item includes all equipment as described above as well as the upgrade of the light pole as included in the “Decorative Light Unit” item.

33. Light Pole Basket Hanger, Item SPV.0060.06.

A Description
This special provision describes furnishing and installing a flower basket hanger and mounting section integral to the decorative light pole.

B Materials
Furnish a reinforced integral flower basket hanger mounting section within the light pole and a single hanger rod. All materials shall be metal fabrication and black in color to match the pole finish.

C Construction
Install flower basket hanger as the manufacturer directs.

D Measurement
The department will measure Light Pole Basket Hanger as each individual unit, acceptably completed, in place by the unit and quantity of each one installed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.06	Light Pole Basket Hangers	Each

Payment is full compensation for providing and installing all materials including fittings, hardware and incidentals; as required to provide a complete and functioning unit.

This item includes all equipment as described above as well as the upgrade of the light pole as included in the "Decorative Light Unit" item.

34. Decorative Street Name Sign Bracket, Item SPV.0060.07.

A Description
This special provision describes furnishing and installing a decorative street name sign bracket.

B Materials
Sign brackets shall be metal fabrication with all exposed surfaces black in color to match the pole finish. Sign brackets shall be designed to mount on the round fluted decorative light pole section. All banding and/or hardware shall be black in color to match the pole finish. The brackets shall not contain scroll-work detailing.

Brackets shall accept the street name signs as provided by the City of Bayfield. Contact the city to confirm the specifications of the street name signs prior to ordering the sign brackets.

C Construction
Install sign brackets as the manufacturer directs. The City of Bayfield shall provide the location and orientation of the street name sign brackets prior to mounting.

D Measurement
The department will measure Decorative Street Name Sign Bracket 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.0060.07	Decorative Street Name Sign Bracket	Each

Payment is full compensation for providing and installing all materials including fittings, hardware and incidentals; as required to provide a complete and functioning unit.

35. Lighting Control Cabinet, Item SPV.0060.08.

A Description

This special provision describes furnishing and installing a lighting control cabinet with all electrical components and wiring assembled.

B Materials

B.1 Contactors

Furnish an open type, multi-pole, 30 Amp, 600V electrically held contactor with 120V control coil as required for control of the lighting and receptacle circuits separately.

B.2 Photocell

Furnish a button type photocell and install as shown on the detail. Apply silicone caulk to maintain the watertight integrity of the enclosure. The photocell shall be rated for 120V, 1500W with 30-60 second delay between “on-off” operations.

B.3 Panel

Furnish a 120/240-volt, 200A main lugs only, single-phase, 42-circuit panel board in a 18” (approximate) wide NEMA 1 enclosure. Provide copper ground and split neutral bus bars in addition to copper bus bars. Provide thermal-magnetic circuit breakers that clearly indicate ON, OFF, or TRIPPED position in the panel. Panel shall be compatible with Square D circuit breakers.

B.4 Selector Switches

Furnish “Hand-Off-Auto” switches to control each circuit separately. Provide a “Hand-Off-Auto” legend plate for each switch. Mount the switches adjacent to the respective contactor.

B.5 Cabinet Enclosure

Provide a NEMA 3R enclosure made from .125" Type 5052-H32 aluminum. The doorframe shall be double flanged and all exterior seams shall be ground smooth. Door handle shall be 3/4" diameter stainless steel with three point latching system and hasp. Main door shall be sealed with a closed-cell neoprene gasket. Main door hinge shall be continuous 0.075” thick stainless steel with a 0.25” stainless steel hinge pin. Provide an aluminum-mounting panel at back (interior) of enclosure. Provide a weatherproof pad lock with 2-3/8” wide body, repinnable/ replacable cylinder, and five keys. There shall be no Corbin main door lock. All exterior hardware shall be pretreated with an iron phosphate coating and powder coat painted black and dried by radiant heat. Applicable code working clearances shall be maintained between equipment mounted within the enclosure.

B.6 Surge Arrester

Furnish a surge suppressor to protect the panel board. The surge suppressor shall provide 6 modes of surge protection, meet UL1449 Second Edition with 32Ka per phase and

48KA system peak surge current, contain LED line indicators, and approximate dimensions of 4.54”Hx2.58”Wx2.22”D. Connect the surge suppressor to the branch circuit breaker as indicated on the plans.

B.7 Field Wiring Termination Blocks
All connections from the field wiring to equipment in the lighting control cabinet shall be made through termination blocks. Provide quantity of channel mount, NEMA type single terminal blocks as indicated on plans that are capable of holding #12 to #1/0 wire with solderless box lugs, for power, neutral and grounding connections. Mount the terminal blocks on a mounting channel of appropriate length with end anchors and an end barrier. Each terminal block shall have a label indicating the appropriate circuit number, neutral (‘N’) or ground (‘G’) wire connected to block; handwritten numbers and letters are not acceptable means of identification. Make connections from the underground field wiring to the equipment in the lighting control cabinet through distribution blocks.

B.8 Convenience GFI Receptacle and Cabinet Light Fixture
Furnish a 20 ampere, 120 volt commercial grade GFI duplex receptacle within a galvanized steel outlet box with cover. 150 watt, 250 volt commercial grade lamp holder with galvanized steel box and 60 watt incandescent bulb. Furnish switch to turn on cabinet light by opening the cabinet door.

B.9 Incidental Materials
Secure all wiring using screw attachment type straps; adhesive type shall not be allowed.

Furnish conduit in accordance to standard spec 652.2, Materials and electrical wiring in accordance to standard spec 655.2, Materials as required from the meter socket to the cabinet lugs.

C Construction
Assemble the control cabinet as shown on the plans. Pretest the cabinet prior to shipment to the site. Mount all equipment to panel in enclosure. Train the cables in straight horizontal and vertical directions and be parallel next to and adjacent to other cables whenever possible. Mount the cabinet to the concrete base per the manufacturer’s requirements. The work under this bid item includes connection and termination to the feeder system wiring.

Install conduit in accordance to standard spec 652.3, Construction and electrical wiring in accordance to standard spec 655.3, Construction as required from the meter socket to the cabinet lugs.

D Measurement
The department will measure Lighting Control Cabinet as each individual lighting control cabinet, 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	Lighting Control Cabinet	Each

Payment is full compensation for furnishing and installing photo control, contactors, panel, distribution blocks, surge arrestor, enclosure, grounding, wiring and electrical components; and for mounting to the concrete base.

36. Protective Bollards, Item SPV.0060.09.

A Description
This special provision describes furnishing and installing bollard posts as shown in the plans.

B Materials
Furnish 4-inch diameter steel bollards for underground base mounting installation at an approximate finished height of 42-inches above grade to the top of the post. Bollards shall be concrete filled and domed at the top of the post. All exposed surfaces shall be black in color using paint methods and materials suited for a long-lasting outdoor application.

C Construction
Install bollards as the manufacturer directs. Contact the City of Bayfield prior to installation to confirm the exact placement of the bollards.

D Measurement
The department will measure Protective Bollards 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.0060.09	Protective Bollards	Each

Payment is full compensation for providing and installing all materials including fittings, hardware and incidentals; as required to provide a complete and functioning unit.

37. Cleaning Culvert Pipes Minimal, Item SPV.0060.10; Cleaning Culvert Pipes Full, Item SPV.0060.11.

A Description
This special provision describes work required for cleaning culvert pipes and ditches in accordance to the pertinent requirements of standard spec 205 and 520 and as hereinafter provided.

B (Vacant)

C Construction
If there is existing riprap at the location, it should be set aside and replaced after waste materials have been removed. Add or place riprap at locations as specified in the plans. Any waste materials removed should be hauled offsite to an upland waste site. No material should be disposed of within any wetlands or low areas. A containment system should be used if necessary. At some locations where endwalls are being replaced, fill material may be required to support the endwall. Obtain this material from cuts completed elsewhere on the project.

Minimal Cleaning—Remove vegetation and built up sedimentation from just inside the culvert, or what is reachable with a hand shovel, to a radius of 10 feet from the end of the culvert or along the ditchline or channel. Some hand work will be required to remove material from the culvert end or apron end wall area. Estimated removal of material is 0-5 yards at each location.

Full Cleaning—Remove vegetation and built up sedimentation from just inside the culvert, or what is reachable with a hand shovel, to a radius of 20 feet from the end of the culvert or along the ditchline or channel. Some hand work will be required to remove material from the culvert end or apron end wall area. Estimated removal of material is 5-10 yards at each location.

Garden and apply erosion control measures to the disturbed areas as soon as work is complete at each location, as appropriate. For locations with a constant flow of water or that have standing water at the inlet and/or discharge end of the culvert, area and/or ditch should be left with as level a bottom as possible. Ensure the drainage way is free of dirt clumps or other debris from work performed in the area.

D Measurement
The department will measure Cleaning Culvert Pipes (Type) as each individual unit, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.10	Cleaning Culvert Pipes Minimal	Each
SPV.0060.11	Cleaning Culvert Pipes Full	Each

Payment is full compensation for performing all work specified herein.

38. Water Main Ductile Iron (DI) 8-Inch, Item SPV.0090.01.

A Description
Furnish and install water main as hereinafter provided.

B Materials

Iron pipe shall be ductile iron conforming to AWWA C151. Fittings shall be ductile or cast iron conforming to the standards herein. Iron pipe and fittings shall be American-made: American, Clow, Griffin, Tyler, U.S. Pipe, or equal.

Ductile iron pipe shall consist of pipe centrifugally cast in metal or sand-lined molds. Pipe wall shall be homogeneous from inside to outside and shall be completely free of laminations, blisters, or other imperfections. Defects may be removed at the factory only.

Each pipe and fitting shall have the weight, class or nominal thickness, country where cast, casting period, manufacturers mark, the year in which the pipe was produced, and the letters DI or DUCTILE cast or stamped thereon. Improper or incomplete marking will be cause for rejection of the pipe or fitting.

The contractor shall furnish certification data representing each class of pipe or fitting furnished. The certification report shall clearly state that all pipe and fittings furnished meet the appropriate AWWA specification.

Exterior Pipe: Ductile iron pipe shall be provided with mechanical joints or push-on joints where buried. Provide flanged joints inside manholes, wet wells or other such structures, and elsewhere exterior as shown on the Drawings or as specified.

Unless otherwise shown on the Drawings, buried pipe shall be minimum Pressure Class 350 with a water hammer allowance of 100 psi. Additional pipe wall thickness shall be furnished as required by AWWA C150 for the depth of cover as shown on the Drawings when using Laying Condition 4 of AWWA C600 or the Class C Bedding Detail as shown on the Drawings.

Flange jointed pipe to be used elsewhere as shown on the Drawings or as specified, shall be minimum Special Thickness Class 53 conforming to AWWA C115 with a minimum rated working pressure of 250 psi and with a water hammer allowance of 100 psi. All flanged pipe shall be made up in strict accordance with AWWA C115 specifications. No field make-up flanges will be allowed unless strictly conforming to AWWA C115 with facing done after turning pipe through flange.

Linings and Coatings: Buried pipe and pipe in manholes, wet wells, and other structures shall be cement-mortar lined and asphaltic coated inside and asphaltic coated outside. Inside lining and coating shall comply with AWWA C104. Outside coating shall comply with AWWA C151. Lining and coatings shall be suitable for use with potable water systems. The asphaltic coating shall be applied over the cement lining on the inside of the pipe and directly on the outside of the pipe. The coatings shall be smooth and impervious to water without any tendency to scale off.

Exterior aboveground pipe and pipe in manholes, wet wells, and other structures shall comply with the above.

Tapping and Bonding: In cases where corporation stops are to be tapped into mains, pipe wall thickness shall be furnished as specified in AWWA C151 to provide four threads or pipe saddles shall be furnished as approved by manufacturer.

All water main, pipe, valves, and fittings shall be furnished with cable bond conductor or electrobond conductivity strips. Lead-tipped gaskets or bronze wedges will not be allowed.

Cutting-in and Repair Tees and Sleeves and Tapping Tees: Cutting-in and repair tees and sleeves and tapping tees shall be of ductile or cast iron with the same rated working pressure of the pipe in which they are installed but no less than 150 psi.

Exterior Joints, Fittings, and Gaskets: Joints, fittings, and gaskets shall have the same rated working pressure of the pipe in which they are installed but no less than a minimum rated working pressure of 150 psi. Fittings shall be cement-mortar lined and asphaltic coated inside and shall be shop primed or asphaltic coated outside as specified above for the piping in which they are being installed.

Joints, fittings, and gaskets for buried piping shall be mechanical joint or push-on joint conforming to AWWA C110 and AWWA C111, as well as AWWA C153 (compact), with vulcanized styrene butadiene rubber gaskets conforming to AWWA C111.

Bolts on mechanical joints shall be high-strength low-alloy steel (Corten, or equal) conforming to AWWA C111; a certificate to that effect shall be provided.

Flange joints, fittings, and gaskets to be used elsewhere as shown on the Drawings or as specified shall conform to AWWA C110, AWWA C111, and to ANSI B16.1. Gaskets for flanged piping shall be full face, minimum 1/8-inch-thick, synthetic rubber gaskets with factory-made holes for flange bolts. Thicker gaskets shall be provided as needed to accommodate allowed tolerances in flange manufacturing.

Gaskets shall be furnished in sufficient number for all joints. Sufficient joint lubricant shall be furnished by the manufacturer with the gaskets.

C Construction

Prior to commencing pipe laying, the contractor shall notify the engineer of the intended date for starting work. The engineer may request at the contractor's expense the removal and relaying of pipe which was installed prior to notification of the engineer.

Proper implements, tools, and facilities shall be provided and used by the contractor for the safe and convenient prosecution of the work. All pipe, fittings, and appurtenances shall be carefully lowered into the trench, piece by piece, with a crane, rope or other suitable tools or equipment, in such manner as to prevent damage to materials. Under no circumstance shall pipe be dropped or rolled into the trench.

Materials shall be as shown on the Drawings or as specified herein.

Material Inspection: The contractor shall inspect the pipe, fittings, and appurtenances for defects when delivered to the job site and prior to lowering into the trench. Defective material shall be removed from the job site. All material shall be clean and free of deleterious substances prior to use in the work.

Bedding and Cover: Immediately prior to placing the pipe, the trench bottom shall be shaped by hand to fit the entire bottom quadrant of the pipe. If pipe is of the bell and spigot type, bell holes shall be provided to prevent the bell from supporting the backfill load. Bell holes shall be large enough to permit proper making of the joint but not larger than necessary to make the joint. All adjustments to line and grade must be done by scraping away or filling in bedding material under the body of the pipe. Any fill used must be bedding material. If necessary to obtain uniform contact of the pipe with the subgrade, a template shall be used to shape the bedding material. All pipe shall be bedded in bedding material at least 4 inches thick. The contractor shall perform all necessary excavation and shall furnish all necessary material to provide this bedding.

Bedding material shall be hard and durable and shall be made by crushing sound limestone or dolomite ledge rock, or crushed gravel aggregate. Bedding material shall conform to the requirements of ASTM C33.

PERCENTAGE BY WEIGHT PASSING INDICATED SIEVE

Size	2 1/2 Inch	2 Inch	1 1/2 Inch	1 Inch	3/4 Inch	1/2 Inch	3/8 Inch	No. 4	No. 8	No. 16	No. 30	No. 100	No. 200
57			100	95-100		25-60		0-10	0-5				
8						100	85-100	10-30	0-10	0-5			
9						100	75-100	0-25	0-5				
10							100	85-100				10-30	

Ductile and cast iron pipe shall be bedded in accordance to Class C bedding detail as shown on the Drawings or the Type 3 laying condition of AWWA C600. Bedding material shall conform to Size No. 57, No. 8, or No. 9. Where ductile iron pipe is polyethylene encased, bedding material shall conform to Size No. 8 or No. 9.

No material native to the trench shall be used for bedding material.

The contractor shall provide the engineer with a sieve analysis of the bedding material for review prior to starting construction.

Material which is to be placed from the bedding material to 1 foot above the top of the pipe shall be termed cover material. All trenches shall be backfilled by hand to 1 foot above the top of the pipe with cover material. Cover material shall be deposited in the trench for its full width on each side of the pipe, fittings and appurtenances simultaneously in 6-inch layers and shall be compacted using hand tamping bars and/or mechanical tampers. The contractor shall use special care in placing cover material to avoid injury to or movement of the pipe. Cover material shall consist of durable granular particles ranging in size from fine to a maximum size of 3/4 inches. Unwashed bank run sand and crushed bank run gravel will be considered generally acceptable cover material. Cover material shall generally conform to the following gradation specifications:

COVER MATERIAL GRADATION

Sieve Size	Percentage by Weight Passing
1 inch	100
3/4 inch	85 to 100
3/8 inch	50 to 80
No. 4	35 to 65
No. 30	--
No. 40	15 to 30
No. 200	5 to 15

Native trench materials may be used for cover material if they substantially conform to the above gradation specifications and a suitable credit is extended to the owner.

All bedding materials may be substituted for cover material when requested by the contractor except where polyethylene encasement is used. In such case, only those bedding materials specifically noted for polyethylene encasement may be used.

Pipe Laying: All pipe shall be laid accurately to the line and grade as designated. Preparatory to making pipe joints, all surfaces of the portions of the pipe to be joined or of the factory-made jointing material shall be clean and dry. Lubricants, primers, adhesives, and other joint material shall be used and installed as recommended by the pipe or joint manufacturer's specifications. The jointing materials or factory fabricated joints shall then be placed, fitted, joined, and adjusted in such a workmanlike manner as to obtain the degree of watertightness specified. Pertinent specifications from the joint and pipe manufacturer which outline procedures to be followed in making the joint shall be furnished to the engineer.

Wyes, tees, and special fittings shall be installed as called for on the Drawings or as requested by the engineer. Wyes, tees, and special fittings shall, in general, be jointed with the same type of joint as used in the pipe.

In joining two dissimilar types of pipe, manufactured adapters and fittings shall be used. Adapters and fittings shall be configured to maintain invert elevations at same level.

Joint deflections shall not exceed the limits established by the pipe manufacturer for the pipe and joint being used.

At times when pipe laying is not in progress, the open ends of pipe shall be closed with plugs to prevent the entry of foreign material. All foreign material shall be removed from the pipe prior to acceptance.

After placing a length of pipe in the trench, the spigot end shall be centered in the bell and the pipe forced home and brought to correct line and grade. The pipe shall be secured in place with specified backfill material tamped around it except at the bells. Trenches shall be kept water-free during bedding, laying, and jointing and for as long a period as necessary to permit proper execution of the work.

Pipe shall be brought home by using a cross member and levers or jacks. It will not be permissible to push pipe home with motor-powered excavation equipment.

Force main and water main shall be installed in accordance to AWWA C600 for iron pipe, AWWA C605 for PVC pipe, and AWWA M55 for HDPE pipe. All plugs, caps, tees, hydrants, and bends for water mains and force mains shall be provided with positive reaction backing or restrained joints.

Reaction backing shall be poured-in-place concrete. Backing shall be placed between solid ground and the fitting to be anchored; the area of bearing on the pipe and on the ground in each instance shall be sized so that the soil bearing pressure does not exceed 1,200 psf, using a working pressure in the main of 150 psi plus 100 psi water hammer allowance. Unless otherwise shown or specified, the backing shall be so placed that the pipe and fitting joints will be accessible for repair.

The contractor may use restrained joints in lieu of reaction backing. The minimum length of pipe to be restrained shall be as shown in the following table.

REQUIRED LENGTH OF RESTRAINED PIPE BEYOND FITTING IN FEET

Fitting	Minimum Length–FT
90° Bend	30
45° Bend	25
22 1/2-Bend	10
11 1/4-Bend	5
Fire Hydrant Leads	All Joints
End of Line Tees (Along Branch and Run)	30
45° Bend-Vertical Up	25
45° Bend-Vertical Down	25

*Restrained run length on tees assumed 18 feet on each side of fitting.

This table assumes 150 psi test pressure plus a 100 psi water hammer allowance, ductile iron pipe, and a 6-foot bury. Lengths shall be adjusted for other conditions and fittings. For other fittings and for more specific requirements, see the Drawings or SPECIAL PROVISIONS.

Megalug retaining glands by Ebba Iron shall be used on all mechanical joints.

Disinfection and Testing: The contractor shall furnish all water and other materials, equipment, and labor necessary to disinfect all new water mains and all existing water mains disturbed by construction. Testing shall conform to AWWA C651. The contractor shall notify the Health Department to observe sterilization test and shall coordinate and bear cost for necessary laboratory testing. Sampling and testing shall be scheduled to complete the work within the Contract Times. Items of material for testing shall be furnished in the size and quantity necessary to properly complete the test. Interruption or delay of the contractor's work progress caused by testing and sampling shall not be cause

for extra payment under the Contract nor shall they be cause for extension of Contract Time.

The contractor shall conduct hydrostatic pressure tests and leakage tests of all joints in accordance to the requirements of AWWA C600 for iron pipe and AWWA C605 for PVC pipe. During performance of the hydrostatic pressure test, water main shall be subjected to a minimum pressure of at least 50% above normal working pressure with a minimum pressure 125 psi. Force main shall be tested to 200% of normal operating pressure in the main, but to no more than the pressure rating of the pipe. All air shall be removed from the main during testing. This shall be done by flushing, by installing corporations at high points, or by releasing air at valves at high points. Test pumping equipment used shall be centrifugal pumps or other pumping equipment that will not place shock pressures on the main. Power plunger pumps will not be permitted for use on closed pipe systems. Pumps shall be disconnected during test periods.

Prior to conducting the pressure and leakage test, the contractor shall backfill the trench for its full depth. All bends and special connections to the main shall be adequately blocked and tied prior to the test. Any damage caused to the main or its appurtenances during performance of these tests shall be corrected by the contractor at its expense.

The contractor shall keep a record of all tests performed. These records shall show the individual lengths of main tested and test results.

Where connections are made to existing mains, it shall be the responsibility of the contractor to provide the necessary hydrostatic tests on all new mains installed. This may necessitate, but is not limited to, the installation of temporary valves to isolate the new system from the existing system. All materials, work, and equipment necessary for this work shall be furnished by the contractor at its expense.

All testing of pipelines shall proceed concurrently with installation. The contractor is advised that it may be advantageous to conduct daily preliminary testing of its work.

Water from disinfection testing shall not be discharged to a stream, creek, river, storm sewer tributary thereto, or to a navigable water without first neutralizing the chlorine residual in the water and complying with local, state, and federal laws thereto.

D Measurement

The department will measure Water Main, Ductile Iron (DI), (8-IN) by the linear foot, acceptably completed. Quantity to be paid for includes construction through valves and other fittings. Tees, reducers, sleeves, and bends will be measured and paid as water main.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Water Main, Ductile Iron (DI) 8-Inch	LF

Payment is full compensation for furnishing all work herein specified and for furnishing all labor, tools, equipment, and incidentals to complete the work.

The price bid shall include the pipe, excavation, dewatering, bedding, laying, jointing, backfilling, and maintenance of surface and all other labor and material necessary for complete compliance with these specifications. The cost of all special connections to existing mains and appurtenances shall be included in the prices bid.

39. Water Service Copper 1 Inch, Item SPV.0090.02.

A Description

This work consists of furnishing and installing new water service laterals complete with stop boxes from new water main as shown on the Drawings and as hereinafter provided.

B Materials

Copper tubing installed within trenches shall be Type K soft annealed seamless copper tubing and shall conform to the specifications of ASTM B88. All other copper shall be Type K hard copper conforming to ASTM B88.

The name or trademark of the manufacturer and a mark indicating the type shall be permanently and plainly marked on tubing.

Fittings for copper tubing shall be cast brass having an alloy of 85% copper, 5% tin, 5% zinc and 5% lead. They shall have uniformity in wall thickness and strength and shall be free from any defect that may affect their serviceability.

Fittings shall be of the flared or compression type. Unions shall be extra heavy 3-part unions only.

Each fitting shall be permanently and plainly marked with the name or trademark of the manufacturer.

Curb boxes shall be of the Arch or Minneapolis Pattern, Ford, Mueller, or equal made with cast iron conforming to ASTM A48, Class 20. The castings shall be free from blowholes, porosity, hard spots, shrinkage defects or cracks, or other injurious defects and shall have a normal smooth casting finish. The pentagon head bolt shall be brass.

The castings shall be thoroughly coated with a 1-mil thickness bituminous coating.

A 2 1/2-inch-diameter box shall be provided for 3/4-inch and 1-inch service stops.

A 3-inch-diameter box with the enlarged base shall be provided for 1-1/4, 1-1/2, and 2-inch service stops.

All curb boxes shall have a maximum length of 7 feet when extended without the use of extension section. Extensions shall be provided for deeper mains.

C Construction

Water service laterals requiring reconstruction and new service laterals shall be installed in accordance to AWWA C600. The contractor shall perform all excavation, backfill, and other work necessary for a complete installation. The service tubing shall be continuous and shall be placed at a minimum depth of 6.5 feet. Each service shall include a corporation stop at the main, copper service tubing, curb stop, curb box, couplings, and all other appurtenances necessary for a complete installation. Where existing services in the street are being reconstructed, the new service shall be connected to the existing service at the property line unless otherwise shown or specified. Taps in the main shall be at an angle of 45° above the horizontal.

The owner reserves the right to make taps and connections to the new mains prior to backfilling by the contractor. The contractor shall delay backfilling until the owner has completed its work.

All curb boxes on new services shall be marked by placing a 4-foot-long 2 by 4 adjacent to it. The 2 by 4 shall project 1 foot above existing ground and shall be painted blue. All services shall be extended to the street property line, unless otherwise shown or specified.

Bedding material for copper water services shall conform to Size No. 9 or No. 10 below.

PERCENTAGE BY WEIGHT PASSING INDICATED SIEVE

Size	2 1/2 Inch	2 Inch	1 1/2 Inch	1 Inch	3/4 Inch	1/2 Inch	3/8 Inch	No. 4	No. 8	No. 16	No. 30	No. 100	No. 200
57			100	95-100		25-60		0-10	0-5				
8						100	85-100	10-30	0-10	0-5			
9						100	75-100	0-25	0-5				
10							100	85-100				10-30	

D Measurement

The department will measure Water Service, Copper, 1-Inch by the linear foot, acceptably completed, measured along centerline of tubing from the centerline of the main to the connection to the existing lateral.

E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.02	Water Service Copper 1-Inch	LF

Payment is full compensation for furnishing all work herein specified and for furnishing all labor, tools, equipment and incidentals to complete the work.

The price bid shall include the pipe, corporation stop, curb stop, extension rod, and box, excavation, dewatering, bedding, cover laying, jointing, backfilling, and maintenance of surface and all other labor and material necessary for complete compliance with these

specifications. The cost of all special connections to existing mains and appurtenances shall be included in the prices bid.

40. Sawing Pavement, Item SPV.0090.03.

A Description
This special provision describes Sawing Pavement in curb and gutter removal areas. Perform work in accordance to standard spec 690, as shown in the plans or as directed by the engineer, and as hereinafter provided.

B (Vacant)

C Construction
Saw full-depth through all layers of existing pavement, including an underlying layer of brick pavers, unless the plans indicate otherwise or as the engineer directs or allows.

D Measurement
The department will measure Sawing Pavement by the linear foot, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.03	Sawing Pavement	LF

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

Removals of materials will be paid for under appropriate bid items.

41. Pullbox Drain Duct, Item SPV.0090.04.

A Description
This work shall be in accordance to the requirements of standard spec 652, the plans, standard detail drawings, and as hereinafter provided.

B Materials
In accordance to the plans and standard spec 652.2 and as hereinafter provided:

Furnish pullbox drain duct to an open ditch or storm sewer inlet in locations as shown on the plans. Drain duct shall be a 2-inch (inside diameter) conduit with minimum rating for light duty underground electrical installations.

Both ends of the drain duct shall be permanently capped to prevent access by rodents and insects. Drill 8 ½-inch diameter holes in each end to allow for drainage.

C Construction
In accordance to the plans and standard spec 652.3 and as hereinafter provided:

Install drain duct in locations as shown on the plans; and at any pullbox locations that are constructed in a sump position with all conduits pitched towards the pullbox.

Install drain duct outlet to an open ditch to a point 4-inches from the slope intercept (not exposed). Terminate the drain duct into a 12" X 12" X 12" section of #2 coarse aggregate in accordance to the material requirements of standard spec 501. Grade the aggregate surface to match surrounding slopes.

Install drain duct to storm sewer structures by coring the wall of the structure or by penetrating through the adjusting rings. Drain duct shall extend between 2" (minimum) – 4" (maximum) beyond the inner wall of the structure. All storm sewer structure openings shall be grouted shut after drain duct installation is complete.

D Measurement
The department will measure Pullbox Drain Duct by the linear foot, acceptably completed, measured from the pullbox to termination point.

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	Pullbox Drain Duct	LF

Payment for the Pullbox Drain Duct bid item is full compensation for providing the duct, fittings, caps, aggregate and all other incidental materials; and for excavating, backfilling, disposing of surplus materials and for making inspections.

42. Concrete Curb and Gutter Cure and Seal Treatment, Item SPV.0090.05.

A Description
This work includes treating all newly constructed concrete curb and gutter with a surface cure and seal treatment as shown on plans, and as hereinafter provided.

B Materials
The treating material shall conform to ASTM C1315, ASTM C309, and AASHTO M148 specifications and be produced by a manufacturer on the approved list.

C Construction
Application rates for the treating material shall be in accordance to the manufacturer's specifications.

D Measurement
The department will measure the Concrete Curb and Gutter Cure and Seal Treatment by the linear foot, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.05	Concrete Curb and Gutter Cure and Seal Treatment	LF

Payment is full compensation for furnishing and applying Concrete Curb and Gutter Cure and Seal Treatment.

43. Abandoning Water Main, Item SPV.0105.01.

A Description
This special provision describes abandoning existing water main by filling it with cellular concrete in accordance to the pertinent requirements of standard spec 204 and 501 and removing existing valve boxes as shown in the plans, capping existing water main fittings, 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 water pipe with cellular concrete and cap any existing water main fittings as shown on the plans and as directed by engineer.

D Measurement
The department will measure Abandoning Water Main as a single lump sum unit of work, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Abandoning Water Main	LS

Payment is full compensation for furnishing all materials; excavating and backfilling where necessary, and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work.

44. Prepare Foundation for Asphaltic Paving Special, Item SPV.0105.02.

A Description
This special provision describes preparation of foundation for asphaltic paving, in accordance to standard spec 211 and as herein provided.

After milling operations, as directed by the engineer, clean and patch cracks and joints, and remove and patch weak and deteriorated areas in the remaining milled asphalt pavement layer and leveling layer within the project limits in accordance to the standard specifications, and as hereinafter provided.

B (Vacant)

C Construction
Supplement standard spec 211.3.5 as follows:

Remove all surplus crack and joint sealing material from the surface of the pavement and all joint material, including fillers and sealers, from joints and cracks to a minimum depth of 1 inch below the surface of the milled asphalt pavement. Clean and/or blow out all cracks and joints prior to refilling.

After milling operations and prior to placement of the leveling layer, completely remove any unstable areas, as directed by the engineer. Refill these areas of removal to the surface of the milled asphaltic pavement with Base Patching Asphaltic. Prior of the placement of the surface layer, completely remove any unstable areas, as directed by the engineer. Refill these areas to the surface of the leveling layer or milled layer, as appropriate, with Base Patching Asphaltic.

D Measurement
The department will measure Prepare Foundation for Asphaltic Paving Special as a single complete lump sum unit of work for preparing foundation for asphaltic paving special, 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	Prepare Foundation for Asphaltic Paving Special	LS

Payment is full compensation for furnishing all work under this item including any sawcuts, any additional milling to remove pavement and any test rolling. Payment for the patching material is under the bid item Base Patching Asphaltic.

45. Material Transfer Vehicle, Item SPV.0105.03.

A Description
This special provision describes furnishing Material Transfer Vehicle (MTV) and an operator for use on this project during HMA upper layer paving operations, as shown in the plans or as directed by the engineer, and as hereinafter provided.

B Materials
The MTV shall be self propelled, remix and maintain constant temperature, and continually feed the paver hopper. The storage capacity shall be adequate to provide continuous forward movement of the paver. The paver speed shall be coordinated to match the delivery of material and capacity of the MTV to limit stopping of the paver.

C Construction
An operator shall remain with the vehicle at all times during moving operations and the paver's hopper shall remain full at all times to avoid segregation of coarse aggregates. No placement of HMA upper layer pavement shall be allowed without the use of the MTV.

D Measurement
The department will measure Material Transfer Vehicle as a single lump sum unit of work for each material transfer vehicle, 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.0105.03	Material Transfer Vehicle	LS

Payment is full compensation for deploying the equipment and its operator; and for furnishing all labor, tools, materials, equipment and incidentals necessary to complete the contract work.

46. Temporary Wedge Joint, Item SPV.0105.04.

A Description
This special provision describes the milling and removing of the temporary upper layer HMA wedge joint in the SMA-Special pavement areas, including sweeping and cleaning of the affected area prior to the abutting pavement placement.

B (Vacant)

C Construction
Immediately prior to the placement of the adjoining lane, mill the temporary wedge joint to a true line with a face perpendicular to the surface of the existing asphaltic surface pavement.

The contractor becomes the owner of the removed asphaltic pavement and is responsible for the disposal as specified for disposing of materials under standard spec 204.3.1.3.

D Measurement
The department will measure Temporary Wedge Joint as a single lump sum unit of work for all wedge joint, acceptably removed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.04	Temporary Wedge Joint	LS

Payment for Temporary Wedge Joint is full compensation for milling, removing, sweeping, cleaning, and disposing of materials.

47. Remove and Restore Terrace Pavers, Item SPV.0165.01.

A Description
This special provision describes removing and reinstalling existing paver stones as shown on the plans and as hereinafter provided.

B Materials
Reuse existing paver stones. Furnish sand bedding for re-setting the paver stones.

C Construction
Carefully remove the existing paver stones and replace any stones damaged during removal with a new stone of similar dimension, color and appearance. Store the paver stones during construction.

Cut the stones around the street light base with a maximum gap of 0.5-inch gap between the concrete footing and the paver stones.

Place stones in compacted sand bedding to be flush with the surrounding surfaces. The final surface of the paver stone area shall not deviate from uniform by more than 0.25-inches.

D Measurement
The department will measure Remove and Restore Terrace Pavers by the square foot, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Remove and Restore Terrace Pavers	SF

Payment is full compensation for providing all required materials; together with all labor, tools, equipment, and incidentals necessary to perform the work.

48. Concrete Sidewalk Cure and Seal Treatment, Item SPV.0165.02.

A Description
This work includes treating all newly constructed concrete sidewalk with a surface cure and seal treatment as shown on plans, and as hereinafter provided.

B Materials
The treating material shall conform to ASTM C1315, ASTM C309, and AASHTO M148 specifications and be produced by a manufacturer on the approved list.

C Construction
Application rates for the treating material shall be in accordance to the manufacturer's specifications.

D Measurement
The department will measure Concrete Sidewalk Cure and Seal Treatment by the square foot, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.02	Concrete Sidewalk Cure and Seal Treatment	SF

Payment is full compensation for furnishing and applying Concrete Sidewalk Cure and Seal Treatment.

49. Pavement Marking Crosswalk Epoxy 36-Inch Special, Item SPV.0165.03.

A Description
Pavement Marking, Crosswalk, Special, shall be constructed in accordance to standard spec 647 amended as follows:

This work shall consist of the furnishing and application of white, epoxy, reflectorized, longitudinal stripes of the width and configuration as specified in the plan.

B (Vacant)

C (Vacant)

D Measurement
The department will measure Pavement Marking, Crosswalk, Epoxy, 36-Inch Special, will be measured by the square foot of paint in place, acceptably completed.

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.03	Pavement Marking Crosswalk Epoxy 36-Inch Special	SF

Payment is full compensation for preparing the surface, furnishing, applying and protecting all materials, including reflectorization.

50. Reheating HMA Pavement Longitudinal Joints Special, Item SPV.0170.01.

A Description
This special provision describes reheating the abutting edge of the previously compacted upper layer in the adjacent lane while paving mainline asphalt pavements.

B (Vacant)

C Construction
C.1 Equipment
Provide a self-contained heating unit that heats by convection only. Do not use forced air to enhance the flame. Provide a fireproof barrier between the flame and the heater's fuel source. The heater must produce a uniform distribution of heat within the heat box. Provide automatic controls to regulate the heater output and shutoff the heater when the paver stops or the heater control system loses power.

Mount the heater on the paver inside the paver's automatic leveling device.

C.2 Reheating Joints
Evenly reheat at least an 8 inch (200 mm) wide strip of the previously compacted surface layer in the adjacent lane as follows:

1. Ambient air temperature at or above 60 degrees F (15 degrees C), reheat to 275 to 320 degrees F (135-160 degrees C).
2. Ambient air temperature below 60 degrees F (15 degrees C), reheat to 240 to 290 degrees F (115-143 degrees C).

The engineer may modify the required joint reheat temperatures to adjust for weather, wind, warm asphalt type mixtures, and other field conditions. Coordinate the heater output and paver speed to achieve the required joint reheat temperature without visible smoke emission.

D Measurement
The department will measure Reheating HMA Pavement Longitudinal Joints Special by the full 100-foot (40 m) survey station, acceptably completed, as measured along the joint. The department will measure partial stations as full stations.

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	Reheating HMA Pavement Longitudinal Joints Special	STA

Payment is full compensation for furnishing all the work required under this bid for item.

51. HMA Pavement Type SMA-Special, Item SPV.0195.01.

A Description
This special provision describes HMA Pavement Type SMA-Special. Perform work in accordance to standard spec 460, as shown in the plans or as directed by the engineer, and as hereinafter provided.

B Materials
Replace Table 460-2 Mixture Requirements with the following:

Mixture Type	**SMA**
ESALS x 10^8 (20 yr design life)	-
LA Wear (AASHTO T 96) 100 revolutions (max % loss) 500 revolutions (max % loss)	 13 35
Soundness (AASHTO T 104) (sodium sulphate, max % loss)	12
Freeze/Thaw (AASHTO T 103) (Specified counties, max % loss)	18
Fractured Faces (ASTM 5821) (one face/2 face, % by count)	100/90
Flat and elongated (ASTM D4791) (max %, by weight)	20 (3:1 ratio)
Fine Aggregate Angularity (AASHTO T304, method A, min)	45
Sand Equivalency (AASHTO T 176, min)	50
Gyratory Compaction Gyrations for N_{ini} Gyrations for N_{des} Gyrations for N_{max}	 8 65 160
Air Voids, % Va (% G_{mm} @ N_{des})	4.0 (96.0)

Mixture Type	SMA
% Gmm @ N_{ini}	-
% Gmm @ N_{max}	-
Dust to binder ratio ^[2] (% passing 0.075/P_{be})	1.2-2.0
Voids filled with binder (VFB or FRA, %)	70-80
Tensile strength ratio (TSR) (ASTM 4867) No antistripping additive With antistripping additive	 0.70 0.75
Draindown at Production Temperature (%)	0.30
Effective Asphalt Content, P_{be} min	5.5 %

Replace standard spec 460.2.5(2) with the following:

Control recycled materials used in HMA by evaluating the percent binder replacement, the ratio of recovered binder to the total binder. The maximum allowable percent binder replacement shall not exceed 9.0 percent. Prior to incorporation into the HMA mixture, 100 percent of the RAS material must be processed to pass the 4.75mm sieve size.

Delete standard spec 460.2.6(2).

Add the following to standard spec 460.2.8.3.1.8:

Remove and replace HMA Pavement Type SMA-Special where excessive bleeding problems (fat spots) occur, as these are unacceptable and shall be corrected or removed, per engineer review, at no additional expense to the department.

Furnish AC PG 70 -28 or AC PG 64-34P for the HMA Pavement Type SMA-Special.

C (Vacant)

D Measurement
The department will measure HMA Pavement Type SMA-Special by the ton, acceptably completed.

E Payment
The department will pay for measured quantities in accordance to standard spec 460.5 of the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.01	HMA Pavement Type SMA-Special	TON

Payment is full compensation for HMA Pavement Type SMA-Special.

52. SMA Pavement Compaction Acceptance, Item SPV.0195.02.

A Description

This special provision describes the density testing requirements for acceptance of stone matrix asphalt (SMA) pavements. Provide mixture designs, quality management program requirements, and materials as specified in standard spec 460, except as required below.

B Materials

Furnish materials conforming to standard spec 460.2.

C Construction

Conform to standard spec 460.3, except as follows:

C.1 Rubber Tired Roller

Rubber tired roller will not be used for compaction of SMA Pavement layer.

C.2 Minimum Required Density and Pavement Density Determination

Replace standard spec 460.3.3.2 with the following:

The initial placement of the first 1,500 feet of SMA Pavement will be accepted by standard compaction methods. After placement of the initial 1,500 feet of SMA Pavement, density will be determined by the control strip methods described below.

After the initial placement of 1,500 feet of SMA pavement construct a control strip at the beginning of work for each layer of SMA to be compacted. Ensure that the control strip, when acceptably compacted and meeting finish and smoothness requirements, remains in place and becomes part of the completed pavement. Ensure that the SMA mixture is composed of the same material with the same mixture design as the rest of the layer.

The control strip shall consist of 1,000 feet of the SMA mixture that contains a minimum of one QC test and 12 sites for nuclear density testing. Within the control strip, the department, using random numbers for stationing, will determine 12 locations for density testing. Relocate any locations determined by random numbers that fall within the wheel paths laterally away from the wheel paths. Upon completion of the desired compaction for the control strip, perform nuclear density tests at the 12 locations. Take nuclear density readings as direct readings without additional materials to aid in seating the gage. Take two cores from the control strip for evaluation of the integrity of the aggregate structure.

Determine the control strip target density by calculating the median value of the random 12 nuclear density locations. Within 24 hours, provide the department with test results for the QC sample and control strip target density. The department will use the control strip target density as the target density for remaining layer acceptance if the air voids from the QC sample falls between 3.5% and 5.0%. If the test results do not meet these minimum requirements, an investigation will result and a new control test strip may be required. The department will base acceptance of the remaining SMA layer on normal department

QMP HMA Pavement Nuclear Density procedures using the control strip median density in percentage as the target.

Stop mixture production and initiate an investigation if any of the following conditions occur:

1. There is a change in binder source;

2. The previous day's maximum specific gravity average from QC testing varies by 0.020 from the value from the initial QC test;

3. The overall blend changes have deviated from the original mix design by 10%;

4. There is a change in the average lot density in two sequential lots either below or above control strip target density by 2.0% inclusive; or

5. Any other condition occurs which in the judgment of the engineer would warrant the establishment of a new control strip density. The engineer may request additional core densities of two per day to verify compaction or to indicate the need for another control test strip.

D (Vacant)

E Payment

E.1 Disincentive for SMA Pavements

For SMA pavement replace standard spec 460.5.2.2 with the following:

If the lot density is less than the specified control strip target density, the department will reduce pay under the Disincentive Density HMA Pavement and Disincentive Density Asphaltic Material administrative items, as follows:

Percent Lot Density Below Control Strip Target Density	**Payment Factor (percent of contract price)**
From 1.1 to 1.5 inclusive	98%
From 1.6 to 2.0 inclusive	95%
From 2.1 to 2.5 inclusive	85%
From 2.6 to 3.0 inclusive	70%
More than 3.0	See footnote [*]

[*] Remove and replace the lot with a mixture at the specified density. After acceptable replacement, the engineer will pay for the lot at the contract unit price per ton, or the engineer may permit the unacceptable material to remain in place with a 50% payment factor.

The engineer will apply no disincentive to any test strip constructed in an acceptable manner as described above.

E.2 Incentive Pay Adjustment for SMA Pavements

For SMA pavement, delete standard spec 460.5.2.3(1).

ADDITIONAL SPECIAL PROVISION 4

Payment to all Subcontractors. Within 10 calendar days of receipt by a contractor of a progress payment for work performed, materials furnished, or materials stockpiled by a subcontractor, the contractor shall pay that subcontractor for all work satisfactorily performed and for all materials furnished or stockpiled.

The contractor agrees further to release retainage amounts to each subcontractor within 10 calendar days after the subcontractor's work is satisfactorily completed. In addition, whenever the Department reduces the contract retainage amount, within 10 calendar days of receipt by a contractor of a retainage payment, the contractor must reduce the total amount retained from subcontractors to no more than remains retained by the Department.

The contractor shall pay the subcontractor within the time frames described above unless the contractor complies with both of the following within 10 calendar days of receiving the Department's progress payment:

1) The contractor notifies the subcontractor in writing that the work is not satisfactorily completed.
2) The contractor requests approval from the Department to delay payment because the subcontractor has not satisfactorily completed the work.

The contractor's request for approval should include the written notification to the subcontractor and shall provide sufficient documentation of good cause to assist the engineer in making a timely decision. If the engineer does not grant approval, the contractor shall pay the subcontractor within 10 calendar days of the Department's decision.

All subcontracting agreements made by a contractor shall include the above provisions and shall be binding on all contractors and subcontractors.

The contractor certifies compliance with the requirements of this Additional Special Provision by signing the contract. This clause applies to both DBE and non-DBE subcontractors.

ADDITIONAL SPECIAL PROVISION 6
ASP 6 - Modifications to the standard specifications

Make the following revisions to the 2013 edition of the standard specifications:

106.3.4.3.1 General

Replace paragraph two with the following effective with the November 2012 letting:

(2) Required sampling and testing methodologies and documentation are specified in CMM chapter 8.

(3) If disputed, approval of materials and components, as well as acceptance of the work incorporating those materials or components, is subject to review under the QMP dispute resolution process.

107.17.3 Railroad Insurance Requirements

Replace the entire text with the following effective with the August 2012 letting:

(1) If required by the special provisions, provide or arrange for a subcontractor to provide railroad protective liability insurance in addition to the types and limits of insurance required in 107.26. Keep railroad protective liability insurance coverage in force until completing all work, under or incidental to the contract, on the railroad right of way or premises of the railroad and until the department has accepted the work as specified in 105.11.2.4.

(2) Provide railroad protective liability insurance coverage written as specified in 23 CFR part 646 subpart A. Provide a separate policy for each railroad owning tracks on the project. Ensure that the railroad protective liability insurance policies provide the following minimum limits of coverage:

1. Coverage A, bodily injury liability and property damage liability; $2 million per occurrence.
2. Coverage B, physical damage to property liability; $2 million per occurrence.
3. An annual aggregate amount of $6 million that shall apply separately to each policy renewal or extension.

(3) Obtain coverage from insurance companies licensed to do business in Wisconsin that have an A.M. Best rating of A- or better. The cost of providing the required insurance coverage and limits is incidental to the contract. The department will make no additional or special payment for providing insurance.

(4) Submit the following to each railroad owning tracks on the project as evidence of that railroad's respective coverage:

1. A certificate of insurance for the types and limits of insurance specified in 107.26.
2. The railroad protective liability insurance policy or other acceptable documentation to the railroad company.

(5) Submit the following to the region as evidence of the required coverage:

1. A copy of the letter to the railroad company transmitting the submittal documents specified in 107.17.3(4).
2. A certificate of insurance for the required railroad protective liability coverages.

(6) Do not begin work on the right of way or premises of the railroad company until the region receives the submittals specified in 107.17.3(5) and notification from the railroad company that the contractor has provided sufficient insurance information to begin work.

(7) Notify the railroad and the region immediately upon cancellation or initiating cancellation, whichever is earlier, or any material change in coverage. Cease operations within 50 feet of the railroad right of way immediately if insurance is cancelled or reduced. Do not resume operations until the required coverage is in force.

460.2.8.3.1.4 Department Verification Testing Requirements

Replace paragraph four with the following effective with the December 2012 letting:

(4) The department will randomly test each design mixture at the following minimum frequency:

FOR TONNAGES TOTALING:	
Less than 501 tons	no tests required
From 501 to 5,000 tons	one test
More than 5,000 tons	add one test for each additional 5,000-ton increment

501.2.1 Portland Cement

Replace paragraph one with the following effective with the March 2013 letting:

(1) Use cement conforming to ASTM specifications as follows:

- Type I portland cement; ASTM C150.
- Type II portland cement; ASTM C150.
- Type III portland cement; ASTM C50, for high early strength.
- Type IP portland-pozzolan cement; ASTM C595, except maximum loss on ignition is 2.0 percent.
- Type IS portland blast-furnace slag cement; ASTM C595.
- Type IL portland-limestone cement; ASTM C595, except maximum nominal limestone content is 10 percent with no individual test result exceeding 12.0 percent.

501.2.5.5 Sampling and Testing

Replace the entire text with the following effective with the January 2013 letting:

(1) Sample and test aggregates for concrete according to the following:

Sampling aggregates	AASHTO T2
Lightweight pieces in aggregate	AASHTO T113
Material finer than No. 200 sieve	AASHTO T11
Unit weight of aggregate	AASHTO T19
Organic impurities in sands	AASHTO T21
Sieve analysis of aggregates	AASHTO T27
Effect of organic impurities in fine aggregate	AASHTO T71
Los Angeles abrasion of coarse aggregate	AASHTO T96
Freeze-thaw soundness of coarse aggregate	AASHTO T103
Sodium sulfate soundness of aggregates	AASHTO T104
Specific gravity and absorption of fine aggregate	AASHTO T84
Specific gravity and absorption of coarse aggregate	AASHTO T85
Flat & elongated pieces based on a 3:1 ratio	ASTM D4791[1]
Sampling fresh concrete	AASHTO R60
Making and curing concrete compressive strength test specimens	AASHTO T23
Compressive strength of molded concrete cylinders	AASHTO T22

[1] As modified in CMM 8-60.

501.2.6 Fly Ash

Replace paragraph three with the following effective with the March 2013 letting:

(3) Test fly ash using a recognized laboratory, as defined in 501.2.2(1), starting at least 30 days before its proposed use, and continuing at ASTM-required frequencies as the work progresses. The manufacturer shall test the chemical and physical properties listed in tables 1 and 2 of ASTM C618 at the frequencies and by the test methods prescribed in ASTM C311.

501.3.1.1.1 Air-Entrained Concrete

Replace paragraph one with the following effective with the March 2013 letting:

(1) Prepare air-entrained concrete with type I, IL, II, IS, or IP portland cement and sufficient air-entraining admixture to produce concrete with the air content specified in 501.3.2.4.

503.2.2 Concrete

Replace paragraph five with the following effective with the March 2013 letting:

(5) Furnish prestressed concrete members cast from air-entrained concrete, except I-type girders may use non-air-entrained concrete. Use type I, IL, IS, , IP, II, or III portland cement. The contractor may replace up to 30 percent of type I, IL, II, or III portland cement with an equal weight of fly ash, slag, or a combination of fly ash and slag, except for prestressed box girders and slabs, the contractor shall replace 20-30 percent of the cement with fly ash, slag, or a combination of fly ash and slag. Ensure that fly ash conforms to 501.2.6 and slag conforms to 501.2.7. Use only one source and replacement rate for work under a single bid item. Use a department-approved air-entraining admixture conforming to 501.2.2 for air-entrained concrete. Use only size No. 1 coarse aggregate conforming to 501.2.5.4.

506.3.22 Shop Inspection

Replace paragraph one with the following effective with the July 2010 letting:

(1) The engineer or an independent inspection agency under department contract may inspect all structural steel and miscellaneous metals furnished. The department will provide the contractor with monthly consultant inspection invoices and identify any quality deficiencies at the fabrication facility.

506.5 Payment

Add paragraph nine as follows effective with the June 2010 letting:

(9) The department will limit costs for inspections conducted under 506.3.2 to $0.05 per pound of material and deduct costs in excess of that amount from payment due the contractor. The department will determine costs for in-house inspections based on hourly rates for department staff plus overhead and use invoiced costs for contracted-out inspections. The department will administer deductions for the contractor's share of the total inspection cost under the Excess Costs For Fabrication Shop Inspection administrative item.

507.2.2.1 General

Replace paragraph four with the following effective with the December 2012 letting:

(4) Ensure that there are no unsound knots or knot holes. Also ensure that there are no tight knots of a diameter exceeding one-quarter of the greater dimension at the point where they occur. Measure a knot by taking its diameter at right angles to the length of the timber. Ensure that the sum of sizes of all knots in any one-foot length does not exceed 2 times the size of the largest allowed single knot. The engineer will treat cluster knots as if they were a single knot. A cluster knot is 2 or more knots grouped together, with the fibers of the wood deflected around the entire unit.

512.3.1 Driving and Cutting Off

Replace the entire text with the following effective with the December 2012 letting:

512.3.1.1 General

(1) Coordinate driving operations to prevent damage or displacement of concrete in substructure units or damage to adjacent facilities due to vibrations.

(2) Drive sheeting with a variation of 1/4 inch or less per foot from the vertical or from the batter the plans show. Ensure that the sheetpiles are within 6 inches of the plan position after driving. Do not damage sheetpiles attempting to correct for misalignment.

(3) Remove and replace, or otherwise correct, sheetpiles the engineer deems unacceptable under 105.3. Submit details of planned corrections to the engineer for review and approval before initiating any corrective actions.

(4) Drive sheetpiles to or beyond the required tip elevation the plans show.

512.3.1.2 Driving System

(1) Furnish a sheetpile driving system capable of driving the sheetpiles to the required minimum tip elevation the plans show.

(2) The engineer may order the contractor to remove a pile driving system component from service if it causes insufficient energy transfer or damages the sheetpiles. Do not return a component to service until the engineer determines that it has been satisfactorily repaired or adjusted.

(3) Drive sheetpiles with diesel, air, steam, gravity, hydraulic, or vibratory hammers.

512.3.1.3 Cut-Offs

(1) Cut off sheetpiles at the elevations the plans show or as the engineer directs. Pile cut-offs become the property of the contractor. Dispose of cut-offs not incorporated into the work.

518.2.1 General

Replace paragraph one with the following effective with the March 2013 letting:

(1) Furnish portland cement and water as specified in 501.2. Unless the engineer allows an alternate, use either type I, IL, IS, , or IP portland cement.

526.3.3 Temporary Structures

Replace paragraphs two through four with the following effective with the January 2013 letting:

(2) Inspect temporary structures conforming to the National Bridge Inspection Standards (NBIS) and the department's structure inspection manual before opening to traffic. Perform additional inspections, as the department's structure inspection manual requires, based on structure type and time in service. Submit inspection reports on department form DT2007 to the engineer and electronic copies to the department's bureau of structures maintenance section. Ensure that a department-certified active team leader, listed online in the department's highway structures information system (HSIS), performs the inspections.

(3) Maintain temporary structures and approaches in place until no longer needed. Unless the engineer directs otherwise, completely remove and dispose of as specified in 203.3.4. Contractor-furnished materials remain the contractor's property upon removal.

614.2.5 Wood Posts and Offset Blocks

Retitle and replace the entire text with the following effective with the July 2012 letting:

614.2.5 Posts and Offset Blocks

614.2.5.1 Wood Posts and Offset Blocks

(1) Furnish sawed posts and offset blocks of one of the following species:

Douglas fir	Southern pine	Ponderosa pine	Jack pine	White pine
Red pine	Western hemlock	Western larch	Hem-fir	Oak

(2) Ensure that posts are the size the plans show and conform to the nominal and minimum dimensions tabulated in 507.2.2.3. The contractor does not have to surface the posts. Provide posts of the net length the plans show after setting and cut off.

(3) Use stress graded posts rated at 1200 psi f_b or higher. Determine the stress grade rating for douglas fir, western larch, and southern pine as specified in 507.2.2.4.

(4) For hem-fir, hemlock, red pine, white pine, jack pine, ponderosa pine, and oak conform to the following:

TABLE 614-1 PROPERTIES FOR WOOD POSTS AND BLOCKS

SPECIES			WESTERN HEMLOCK, HEM-FIR, RED PINE, WHITE PINE, JACK PINE, PONDEROSA PINE		OAK	
MAXIMUM SLOPE OF GRAIN			1 in 15		1 in 12	
NOMINAL WIDTH OF FACE			6"	8"	6"	8"
SHAKES, CHECKS, AND SPLITS		GREEN	1"	1 3/8"	2 3/8"	3 1/8"
		SEASONED	1 1/2"	2"	2 5/8"	3 1/2"
MAXIMUM WANE			1"	1 3/8"	1 1/8"	1 5/8"
MAXIMUM ALLOWABLE KNOTS	NARROW FACE	MIDDLE 1/3 OF LENGTH	1 3/8"	1 5/8"	2 1/8"	2 3/8"
		END[1]	2 3/4"	3 1/4"	4 1/4"	4 3/4"
		SUM IN MIDDLE 1/2 OF LENGTH[2]	11"	13"	17"	19
	WIDE FACE	EDGE KNOT N MIDDLE 1/3 OF LENGTH	1 3/8"	1 5/8"		
		EDGE KNOT AT END[1]	2 3/4" 7	3 1/4"		
		CENTERLINE	1 3/8"	1 7/8"	2 1/4"	2 7/8"
		SUM IN MIDDLE 1/2 OF LENGTH	5 1/2"	7 1/2"	9"	11 1/2"

[1] But do not exceed the maximum allowable knot on the centerline of the wide face of the same piece.

[2] But do not exceed 4 times the maximum allowable knot on the centerline of the wide face of the same piece.

(5) Pressure treat posts and offset blocks as specified in 507.2.2.6. Use one of the oil-soluble preservatives or chromated copper arsenate conforming to 507.2.3. Use the same material for offset blocks and posts and treat material used in each continuous installation with the same type of preservative.

614.2.5.2 Steel Posts

(1) Furnish steel posts conforming to AASHTO M270 Grade 36 and galvanized according to AASTHO M111.

614.2.5.3 Plastic Offset Blocks

(1) Furnish plastic offset blocks from the department's approved products list.

614.3.1 General

Replace the entire text with the following effective with the July 2012 letting:

(1) Paint the ends of cut-off galvanized posts, rail, bolts, cut or drilled surfaces of galvanized components, and areas of damaged zinc coating with 2 coats of zinc dust/zinc oxide paint. Clean the damaged and adjacent areas thoroughly before applying paint.

(2) Apply 2 coats of wood preservative to cut surfaces of wood components. Use the same preservative originally used to treat that component or use a 2-percent solution of copper naphthenate conforming to AWPA Standard P8 or P36.

614.3.2.1 Installing Posts

Replace paragraph four with the following effective with the July 2012 letting:

(4) Cut post tops to the finished elevation the plans show.

628.2.13 Rock Bags

Replace paragraph one with the following effective with the November 2012 letting:

(1) Furnish rock bags made of a porous, ultraviolet resistant, high-density polyethylene or geotextile fabric that will retain 70% of its original strength after 500 hours of exposure according to ASTM D4355 and a minimum in-place filled size of 18-inches long by 12-inches wide by 6-inches high. Ensure that the fabric conforms to the following:

TEST REQUIREMENT	METHOD	VALUE
Minimum Tensile	ASTM D4632	
Machine direction		70 lb minimum
Cross direction		40 lb minimum
Elongation	ASTM D4632	
Machine direction		20% minimum
Cross direction		10 % min
Puncture	ASTM 4833	65 lbs minimum
Minimum Apparent Opening		0.0234 inches (No. 30 sieve)
Maximum Apparent Opening		0.0787 inches (No. 10 sieve)

639.2.1 General

Replace paragraph two with the following effective with the March 2013 letting:

(2) For grout use fine aggregate conforming to 501.2.5.3 and type I, IL, IS, or IP portland cement.

649.3.1 General

Replace paragraphs three and four with the following effective with the March 2013 letting:

(3) For pavements open to all traffic, apply centerline and no-passing barrier line markings as follows:

- On intermediate pavement layers, including milled surfaces, on the same day the pavement is placed or milled.
- On the upper layer of pavement, on the same day the pavement is placed unless the contractor applies permanent marking on the same day the pavement is placed.

If weather conditions preclude same-day application, apply as soon as weather allows. Do not resume next-day construction operations until these markings are completed unless the engineer allows otherwise.

(4) If required to apply no passing zone temporary pavement marking, reference the beginning and end of all existing no-passing barrier lines. Apply temporary no-passing barrier lines at those existing locations. If the contract contains the Locating No-Passing Zones bid item, relocate the no-passing zones as specified in section 648 for permanent marking.

701.4.2 Verification Testing

Replace paragraph two with the following effective with the December 2012 letting:

(2) The department will sample randomly at locations independent of the contractor's QC tests and use separate equipment and laboratories. The department will conduct a minimum of one verification test for each 5 contractor QC tests unless specific QMP provisions specify otherwise.

715.2.3.1 Pavements

Replace paragraph two with the following effective with the March 2013 letting:

(2) Provide a minimum cement content of 565 pounds per cubic yard, except if using type I, IL, or III portland cement in a mix where the geologic composition of the coarse aggregate is primarily igneous or metamorphic materials, provide a minimum cement content of 660 pounds per cubic yard.

715.3.1.3 Department Verification Testing

Replace paragraph one with the following effective with the December 2012 letting:

(1) The department will perform verification testing as specified in 701.4.2 except as follows:

- Air content, slump, and temperature: a minimum of 1 verification test per lot.
- Compressive strength: a minimum of 1 verification test per lot.

Errata

Make the following corrections to the 2013 edition of the standard specifications:

102.12 Public Opening of Proposals

Correct 102.12(1) errata by changing htm to shtm in the web link.

(1) The department will publicly open proposals at the time and place indicated in the notice to contractors. The department will post the total bid for each proposal on the Bid Express web site beginning at 9:30 AM except as specified in 102.8. If a proposal has no total bid shown, the department will not post the bid. After verification for accuracy under 103.1, the department will post bid totals on the department's HCCI web site.

http://roadwaystandards.dot.wi.gov/hcci/bid-letting/index.shtm

107.22 Contractor's Responsibility for Utility Facilities, Property, and Services

Correct errata by eliminating references to the department. Costs are determined by statute.

(3) If the contractor damages or interrupts service, the contractor shall notify the utility promptly. Coordinate and cooperate with the utility in the repair of the facility. Determine who is responsible for repair costs according to Wisconsin statutes 66.0831 and 182.0175(2).

204.3.2.2 Removing Items

Correct errata by changing the reference from 490.3.2 to 490.3.

(5) Under the Removing Asphaltic Surface Milling bid item, remove and dispose of existing asphaltic pavement or surfacing by milling at the location and to the depth the plans show. Mill the asphaltic pavement or surfacing as specified for milling salvaged asphaltic pavement in 490.3.

501.2.9 Concrete Curing Materials.

Correct errata by changing AASHTO M171 to ASTM C171.

(4) Furnish polyethylene-coated burlap conforming to ASTM C171 for white burlap-polyethylene sheets.

506.2.6.5.2 Pad Construction

Correct errata by changing ASTM A570 to ASTM A1011.

(4) For the internal steel plates use rolled mild steel conforming to ASTM A36, or ASTM A1011 grade

512.3.3 Painting

Correct errata by changing 511.3.5 to 550.3.11.3.

(1) Paint permanent steel sheet piling as specified for painting steel piling in 550.3.11.3.

513.2.2.8 Toggle Bolts

Correct errata by changing ASTM A570 to ASTM A1011.

(1) Use toggle bolts made of steel, conforming to the plans. Make the assembly from the material specified below:

Toggle bolt and pin ..... Cold finished steel heat-treated Brinell 311-363 ASTM A354.

Toggle washer ..... Hot rolled steel ASTM A1011. Manufacturer's standard washer.

Spacer nut ..... Grade 1213, ASTM A108. Cold finished steel heat-treated ASTM A325.

660.2.1 General

Correct errata by changing section 511 to 550.

(1) Furnish materials conforming to the following:

Concrete ..... section 501

Concrete bridges ..... section 502

Luminaires ..... section 659

Steel piling ..... section 550

Steel reinforcement ..... section 505

660.3.2.3 Pile Type Foundations

Correct errata by changing section 511 to 550.

(1) Drive piles as specified in for steel piling in section 550.

701.3 Contractor Testing

Correct errata by updating AASHTO T141 to AASHTO R60 and changing AASHTO T309 to ASTM C1064.

(1) Perform contract required QC tests for samples randomly located according to CMM 8-30. Also perform other tests as necessary to control production and construction processes, and additional testing enumerated in the contractor's quality control plan or that the engineer directs. Use test methods as follows:

TABLE 701-2 TESTING STANDARDS

TEST	TEST STANDARD
Washed P 200 analysis	AASHTO T11[1]
Sieve analysis of fine and coarse aggregate	AASHTO T27[1]
Aggregate moisture	AASHTO T255[1]
Sampling freshly mixed concrete	AASHTO R60
Air content of fresh concrete	AASHTO T152[2]
Concrete slump	AASHTO T119[2]
Concrete temperature	ASTM C1064
Concrete compressive strength	AASHTO T22
Making and curing concrete cylinders	AASHTO T23
Standard moist curing for concrete cylinders	AASHTO M201

[1] As modified in CMM 8-60.

[2] As modified in CMM 8-70.

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://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm

(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 section 3.2 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at: http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/docs/crc-basic-info.pdf

Effective with September 2004 Letting

WISCONSIN DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

I. WAGE RATES, HOURS OF LABOR AND PAYMENT OF WAGES

The schedule of "Minimum Wage Rates" attached hereto and made a part hereof furnishes the prevailing wage rates that have been determined pursuant to Section 103.50 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the various laborers, workers, mechanics and truck drivers employed by contractors and subcontractors on the construction work embraced by the contract and subject to prevailing hours and wages under Section 103.50, Stats. If necessary to employ laborers, workers, mechanics or truck drivers whose classification is not listed on the schedule, they shall be paid at rates conformable to those listed for similar classifications. Apprentices shall be paid at rates not less than those prescribed in their state indenture contacts.

While the wage rates shown are the minimum rates required by the contract to be paid during its life, this in not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price shall be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

Pursuant to Section 103.50 of the Wisconsin Statutes, the prevailing hours of labor have been determined to be up to 10 hours per day and 40 hours per calendar week Monday through Friday. If any laborer, worker, mechanic or truck driver is permitted or required to work more than the prevailing number of hours per day or per calendar week on this contract, they shall be paid for all hours in excess of the prevailing hours at a rate of at least one and one-half (1 1/2) times their hourly rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half: (1) January 1, (2) the last Monday in May, (3) July 4, (4) the first Monday in September, (5) the fourth Thursday in November, (6) December 25, (7) the day before if January 1, July 4 or December 25 falls on a Saturday and (8) the day following if January 1, July 4 or December 25 falls on a Sunday.

All laborers, workers, mechanics and truck drivers shall be paid unconditionally not less often than once a week. Persons who own and operate their own trucks must receive the prevailing truck driver rate for the applicable type of truck (i.e. 2 axle, 3 or more axle, articulated, eculid or dumptor) he or she operates, plus an agreed upon amount for the use of his or her truck. Every owner-operator MUST be paid separately for their driving and for the use of their truck.

For those projects subject to the requirements of the Davis-Bacon Act, the Secretary of Labor will also have determined "Minimum Wage Rates" for work to be performed under the contract. These rates are, for all or most of the labor, worker, mechanic or truck driver classifications, identical to those established under Section 103.50 of the Wisconsin Statutes. In the event the rates are not identical, the higher of the two rates will govern.

II. PAYROLL REQUIREMENTS

All contractors and subcontractors must submit weekly Certified Payrolls and Compliance Statement verifying that all laborers, workers, mechanics and truck drivers working on the project have been paid the prevailing wage rates for all work performed under the contract required by Section 103.50 of the Wisconsin Statutes.

III. POSTINGS AT THE SITE OF THE WORK

In addition to the required postings furnished by the Department, the contractor shall post the following in at least one conspicuous place at the site of work:

a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 103.50 of the Wisconsin Statutes.

b. A copy of the State of Wisconsin Minimum Wages Rates. (Four pages.)

c. A copy of the contractor's Equal Employment Opportunity Policy.

d. On any project involving federal aid, in addition to the furnished postings, the contractor shall post a copy of the "Davis-Bacon Act, Minimum Wage Rates". (Three pages.)

IV. WAGE RATE REDISTRIBUTION

The amount specified as the hourly basic rate of pay and the amount(s) specified as the fringe benefit contribution(s), for all classes of laborers, workers, mechanics or truck drivers may be redistributed, when necessary, to conform to those specified in any applicable collective bargaining agreement, provided that both parties to such agreement

request and receive the approval for any such redistribution from both the Department of Transportation and the Department of Workforce Development prior to the implementation of such redistribution.

V. ADDITIONAL CLASSIFICATIONS

Any unlisted laborer or mechanic classification that is needed to perform work on this project, and is not included within the scope of any of the classifications listed in the application prevailing wage rate determination, may be added after award only if all of the following criteria have been met:

1. The affected employer(s) must make a written request to WisDOT Central Office to utilize the unlisted classification on this project.

2. The request must indicate the scope of the work to be performed by the unlisted classification and must indicate the proposed wage/fringe benefit package that the unlisted classification is to receive.

3. The work to be performed by the unlisted classification must not be performed by a classification that is included in the applicable prevailing wage rate determination.

4. The unlisted classification must be commonly employed in the area where the project is located.

5. The proposed wage/fringe benefit package must bear a reasonable relationship to those set forth in the applicable prevailing wage rate determination.

6. The request should be made prior to the actual performance of the work by the unlisted classification.

7. DWD must approve the use of the unlisted classification and the proposed wage/fringe benefit package. USDOL also must approve the use of the unlisted classification and the proposed wage/fringe benefit package on federal aid projects.

8. WisDOT and DWD may amend the proposed wage/fringe benefit package, as deemed necessary, and may set forth specific employment ratios and scope of work requirements in the approval document.

The approved wage/fringe benefit package shall be paid to all laborers, workers, mechanics or truck drivers performing work within the scope of that performed by the unlisted classification, from the first day on which such work is performed. In the event that work is performed by the unlisted classification prior to approval, the wage/fringe benefit package to be paid for such work must be in conformance with the wage/fringe

benefit package approved for such work. Under this arrangement a retroactive adjustment in wages and/or fringe benefits may be required to be made to the affected laborers, workers, mechanics or truck drivers by the affected employer(s).

ANNUAL PREVAILING WAGE RATE DETERMINATION
FOR ALL STATE HIGHWAY PROJECTS
BAYFIELD COUNTY

Compiled by the State of Wisconsin - Department of Workforce Development
for the Department of Transportation
Pursuant to s. 103.50, Stats.
Issued on April 1, 2012

CLASSIFICATION: Contractors are required to call the Department of Workforce Development if there are any questions reqarding the proper trade or classification to be used for any worker on a public works project.

OVERTIME: Time and one-half must be paid for all hours worked over 10 hours per day and 40 hours per calendar week and for all hours worked on Saturday, Sunday and the following six (6) holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25; the day before if January 1, July 4 or December 25 falls on a Saturday; the day following if January 1, July 4 or December 25 falls on a Sunday.

FUTURE INCREASE: If indicated for a specific trade or occupation, the full amount of such increase MUST be added to the "TOTAL" indicated for such trade or occupation on the date(s) such increase(s) becomes effective.

PREMIUM PAY: If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.

SUBJOURNEY: Wage rates may be available for some of the classifications indicated below. Any employer that desires to use any subjourney classification on a project MUST request the applicable wage rate from the Department of Workforce Development PRIOR to the date such classification is used on such project. Form ERD-10880 is available for this purpose and can be obtained by writing to the Department of Workforce Development, Equal Rights Division, P.O. Box 8928, Madison, WI 53708.

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Bricklayer, Blocklayer or Stonemason	32.66	15.92	48.58
Carpenter	29.06	15.16	44.22
Cement Finisher	29.17	15.74	44.91
Electrician	37.25	14.05	51.30
Fence Erector	35.62	0.00	35.62
Ironworker	30.90	19.11	50.01
Line Constructor (Electrical)	35.97	18.08	54.05
Painter	20.85	7.34	28.19
Pavement Marking Operator	28.97	15.95	44.92
Piledriver	28.11	23.37	51.48
Roofer or Waterproofer	29.20	15.20	44.40
Teledata Technician or Installer	21.26	14.55	35.81
Tuckpointer, Caulker or Cleaner	34.30	16.60	50.90
Underwater Diver (Except on Great Lakes)	36.20	18.81	55.01
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	33.87	16.10	49.97
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	28.78	16.21	44.99
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	25.18	13.07	38.25
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	23.38	12.48	35.86
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.30	10.97	32.27
TRUCK DRIVERS			
Single Axle or Two Axle	22.35	16.19	38.54
Future Increase(s): Add $1.75/hr on 6/1/2012; Add $1.85/hr on 6/1/2013.			

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
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	22.50	16.19	38.69
Future Increase(s): Add $1.75/hr on 6/1/2012; Add $1.85/hr on 6/1/2013. 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	26.77	18.90	45.67
Future Increase(s): Add $2/hr on 6/1/12; Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Pavement Marking Vehicle	23.84	14.77	38.61
Shadow or Pilot Vehicle	24.76	15.35	40.11
Truck Mechanic	24.91	15.35	40.26
LABORERS			
General Laborer	26.92	13.45	40.37
Future Increase(s): Add $1.60/hr on 6/1/2012: Add $1.70/hr on 6/1/2013; Add $1.60/hr on 6/1/2014. Premium Pay: Add $.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add $.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add $.20/hr for blaster and powderman; Add $.25/hr for bottomman; Add $.35/hr for line and grade specialist; Add $.45/hr for pipelayer. DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	22.00	17.15	39.15
Landscaper	26.92	13.45	40.37
Future Increase(s): Add $1.60/hr on 6/1/12; Add $1.70/hr on 6/1/13; Add $1.60/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	23.55	13.45	37.00
Future Increase(s): Add $1.60/hr on 6/1/2012; Add $1.70/hr on 6/1/2013; Add $1.60/hr on 6/1/2014. 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 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.			
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	13.00	0.66	13.66
Railroad Track Laborer	23.96	12.88	36.84

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY $	HOURLY FRINGE BENEFITS $	TOTAL $
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). Future Increase(s): Add $2/hr on 6/1/12; Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	34.22	18.90	53.12
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add $2/hr on 6/1/12; Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	33.72	18.90	52.62
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, VIbratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane WIth a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches	33.22	18.90	52.12

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY $	HOURLY FRINGE BENEFITS $	TOTAL $
& A- Frames. Future Increase(s): Add $2/hr on 6/1/12; Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or WIthout Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add $2/hr on 6/1/12; Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	32.96	18.90	51.86
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 $2/hr on 6/1/12; Add $2/hr on 6/1/13; Add $1.75/hr on 6/1/14. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	32.67	18.90	51.57
Fiber Optic Cable Equipment.	24.05	0.00	24.05
Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	36.20	18.81	55.01
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.	36.20	18.81	55.01
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.	26.80	18.52	45.32
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.	26.80	18.52	45.32

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 CONTRACT ITEMS					
0010	201.0105 CLEARING	6.000 STA		.		.
0020	201.0205 GRUBBING	6.000 STA		.		.
0030	204.0110 REMOVING ASPHALTIC SURFACE	524.000 SY		.		.
0040	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS	633.000 SY		.		.
0050	204.0120 REMOVING ASPHALTIC SURFACE MILLING	100,550.000 SY		.		.
0060	204.0150 REMOVING CURB & GUTTER	12,419.000 LF		.		.
0070	204.0155 REMOVING CONCRETE SIDEWALK	1,473.000 SY		.		.
0080	204.0195 REMOVING CONCRETE BASES	13.000 EACH		.		.
0090	204.0245 REMOVING STORM SEWER (SIZE) 01. 12-INCH	124.000 LF		.		.
0100	204.0245 REMOVING STORM SEWER (SIZE) 02. 15-INCH	24.000 LF		.		.

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0110	204.0245 REMOVING STORM SEWER (SIZE) 03. 24-INCH	492.000 LF		.		.
0120	205.0100 EXCAVATION COMMON	2,466.000 CY		.		.
0130	209.0100 BACKFILL GRANULAR	1,275.000 CY		.		.
0140	213.0100 FINISHING ROADWAY (PROJECT) 01. 8160-14-71	1.000 EACH		.		.
0150	305.0110 BASE AGGREGATE DENSE 3/4-INCH	11,539.000 TON		.		.
0160	305.0500 SHAPING SHOULDERS	331.000 STA		.		.
0170	310.0110 BASE AGGREGATE OPEN GRADED	2,846.000 TON		.		.
0180	390.0203 BASE PATCHING ASPHALTIC	3,500.000 SY		.		.
0190	416.0160 CONCRETE DRIVEWAY 6-INCH	118.000 SY		.		.
0200	455.0145 ASPHALTIC MATERIAL PG64-34P	730.900 TON		.		.
0210	455.0605 TACK COAT	2,369.000 GAL		.		.

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0220	460.1103 HMA PAVEMENT TYPE E-3	12,102.000 TON		.		.
0230	460.2000 INCENTIVE DENSITY HMA PAVEMENT	8,380.000 DOL	1.00000		8380.00	
0240	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	52.000 TON		.		.
0250	465.0315 ASPHALTIC FLUMES	24.000 SY		.		.
0260	520.7000 CLEANING CULVERT PIPES	3.000 EACH		.		.
0270	520.8000 CONCRETE COLLARS FOR PIPE	3.000 EACH		.		.
0280	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH	1.000 EACH		.		.
0290	525.0124 CULVERT PIPE CORRUGATED ALUMINUM 24-INCH	8.000 LF		.		.
0300	525.0424 STEEL APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 24-INCH	13.000 EACH		.		.
0310	525.0430 STEEL APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 30-INCH	2.000 EACH		.		.

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0320	525.0436 STEEL APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 36-INCH	5.000 EACH		.		.
0330	525.0448 STEEL APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 48-INCH	1.000 EACH		.		.
0340	525.0454 STEEL APRON ENDWALLS FOR ALUMINUM CULVERT PIPE 54-INCH	1.000 EACH		.		.
0350	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D	4,652.000 LF		.		.
0360	601.0557 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	6,680.000 LF		.		.
0370	602.0405 CONCRETE SIDEWALK 4-INCH	20,324.000 SF		.		.
0380	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW	224.000 SF		.		.
0390	606.0100 RIPRAP LIGHT	2.000 CY		.		.
0400	606.0200 RIPRAP MEDIUM	242.000 CY		.		.
0410	606.0400 RIPRAP EXTRA-HEAVY	74.000 CY		.		.
0420	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	490.000 LF		.		.

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0430	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	62.000 LF		.		.
0440	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	453.000 LF		.		.
0450	611.0430 RECONSTRUCTING INLETS	4.000 EACH		.		.
0460	611.0530 MANHOLE COVERS TYPE J	4.000 EACH		.		.
0470	611.0600 INLET COVERS TYPE A	2.000 EACH		.		.
0480	611.0624 INLET COVERS TYPE H	8.000 EACH		.		.
0490	611.0627 INLET COVERS TYPE HM	10.000 EACH		.		.
0500	611.0636 INLET COVERS TYPE HM-S	9.000 EACH		.		.
0510	611.2004 MANHOLES 4-FT DIAMETER	4.000 EACH		.		.
0520	611.3225 INLETS 2X2.5-FT	11.000 EACH		.		.
0530	611.8110 ADJUSTING MANHOLE COVERS	32.000 EACH		.		.

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0540	611.8115 ADJUSTING INLET COVERS	10.000 EACH		.		.
0550	612.0106 PIPE UNDERDRAIN 6-INCH	1,394.000 LF		.		.
0560	618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 8160-14-71	1.000 EACH		.		.
0570	619.1000 MOBILIZATION	1.000 EACH		.		.
0580	624.0100 WATER	5.000 MGAL		.		.
0590	625.0100 TOPSOIL	2,352.000 SY		.		.
0600	625.0500 SALVAGED TOPSOIL	2,185.000 SY		.		.
0610	627.0200 MULCHING	4,537.000 SY		.		.
0620	628.1104 EROSION BALES	50.000 EACH		.		.
0630	628.1504 SILT FENCE	500.000 LF		.		.
0640	628.1520 SILT FENCE MAINTENANCE	500.000 LF		.		.

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0650	628.1905 MOBILIZATIONS EROSION CONTROL	2.000 EACH		.		.
0660	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL	3.000 EACH		.		.
0670	628.2027 EROSION MAT CLASS II TYPE C	2,876.000 SY		.		.
0680	629.0210 FERTILIZER TYPE B	3.170 CWT		.		.
0690	630.0120 SEEDING MIXTURE NO. 20	97.000 LB		.		.
0700	630.0140 SEEDING MIXTURE NO. 40	53.330 LB		.		.
0710	630.0200 SEEDING TEMPORARY	50.000 LB		.		.
0720	633.0200 DELINEATORS FLEXIBLE	2.000 EACH		.		.
0730	633.5200 MARKERS CULVERT END	53.000 EACH		.		.
0740	634.0612 POSTS WOOD 4X6-INCH X 12-FT	1.000 EACH		.		.
0750	634.0614 POSTS WOOD 4X6-INCH X 14-FT	155.000 EACH		.		.

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0760	634.0616 POSTS WOOD 4X6-INCH X 16-FT	51.000 EACH		.		.
0770	634.0812 POSTS TUBULAR STEEL 2X2-INCH X 12-FT	5.000 EACH		.		.
0780	637.0202 SIGNS REFLECTIVE TYPE II	1,352.070 SF		.		.
0790	638.2602 REMOVING SIGNS TYPE II	250.000 EACH		.		.
0800	638.3000 REMOVING SMALL SIGN SUPPORTS	209.000 EACH		.		.
0810	642.5201 FIELD OFFICE TYPE C	1.000 EACH		.		.
0820	643.0200 TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 01. 8160-14-71	90.000 DAY		.		.
0830	643.0300 TRAFFIC CONTROL DRUMS	1,000.000 DAY		.		.
0840	643.0410 TRAFFIC CONTROL BARRICADES TYPE II	750.000 DAY		.		.
0850	643.0420 TRAFFIC CONTROL BARRICADES TYPE III	1,520.000 DAY		.		.
0860	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A	5,450.000 DAY		.		.

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0870	643.0900 TRAFFIC CONTROL SIGNS	2,540.000 DAY		.		.
0880	643.2000 TRAFFIC CONTROL DETOUR (PROJECT) 01. 8160-14-71	1.000 EACH		.		.
0890	643.3000 TRAFFIC CONTROL DETOUR SIGNS	7,260.000 DAY		.		.
0900	645.0120 GEOTEXTILE FABRIC TYPE HR	90.000 SY		.		.
0910	645.0130 GEOTEXTILE FABRIC TYPE R	490.000 SY		.		.
0920	645.0140 GEOTEXTILE FABRIC TYPE SAS	3,200.000 SY		.		.
0930	646.0106 PAVEMENT MARKING EPOXY 4-INCH	51,064.000 LF		.		.
0940	646.0126 PAVEMENT MARKING EPOXY 8-INCH	75.000 LF		.		.
0950	646.0406 PAVEMENT MARKING SAME DAY EPOXY 4-INCH	43,615.000 LF		.		.
0960	647.0256 PAVEMENT MARKING SYMBOLS EPOXY	2.000 EACH		.		.
0970	647.0456 PAVEMENT MARKING CURB EPOXY	1,243.000 LF		.		.

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0980	647.0606 PAVEMENT MARKING ISLAND NOSE EPOXY	2.000 EACH		.		.
0990	647.0656 PAVEMENT MARKING PARKING STALL EPOXY	843.000 LF		.		.
1000	648.0100 LOCATING NO-PASSING ZONES	5.000 MI		.		.
1010	649.0200 TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	41,860.000 LF		.		.
1020	650.4000 CONSTRUCTION STAKING STORM SEWER	17.000 EACH		.		.
1030	650.4500 CONSTRUCTION STAKING SUBGRADE	800.000 LF		.		.
1040	650.5000 CONSTRUCTION STAKING BASE	800.000 LF		.		.
1050	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	14,284.000 LF		.		.
1060	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE	27,000.000 LF		.		.
1070	650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 8160-14-71	LUMP	LUMP			.

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1080	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	2,416.000 LF		.		.
1090	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	1,289.000 LF		.		.
1100	652.0325 CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH	880.000 LF		.		.
1110	652.0605 CONDUIT SPECIAL 2-INCH	967.000 LF		.		.
1120	653.0140 PULL BOXES STEEL 24X42-INCH	15.000 EACH		.		.
1130	654.0205 CONCRETE CONTROL CABINET BASES TYPE 7	1.000 EACH		.		.
1140	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	8,603.000 LF		.		.
1150	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG	5,616.000 LF		.		.
1160	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG	6,066.000 LF		.		.
1170	655.0630 ELECTRICAL WIRE LIGHTING 4 AWG	27,378.000 LF		.		.
1180	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. 637+70	LUMP	LUMP			.

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1190	690.0150 SAWING ASPHALT	9,193.000 LF		.		.
1200	690.0250 SAWING CONCRETE	504.000 LF		.		.
1210	999.1000.S SEISMOGRAPH	LUMP	LUMP			.
1220	999.1500.S CRACK AND DAMAGE SURVEY	LUMP	LUMP			.
1230	SPV.0035 SPECIAL 01. CONDUIT BEDDING MATERIAL	25.000 CY		.		.
1240	SPV.0060 SPECIAL 01. WATER MAIN, GATE VALVE AND VALVE BOX, 8-INCH	2.000 EACH		.		.
1250	SPV.0060 SPECIAL 02. SALVAGE EXISTING GATE VALVE	4.000 EACH		.		.
1260	SPV.0060 SPECIAL 03. ADJUSTING WATERVALVE BOX	23.000 EACH		.		.
1270	SPV.0060 SPECIAL 04. DECORATIVE LIGHT UNIT	47.000 EACH		.		.
1280	SPV.0060 SPECIAL 05. LIGHT POLE RECEPTACLE	47.000 EACH		.		.
1290	SPV.0060 SPECIAL 06. LIGHT POLE BASKET HANGER	47.000 EACH		.		.

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1300	SPV.0060 SPECIAL 07. DECORATIVE STREET NAME SIGN BRACKET	6.000 EACH		.		.
1310	SPV.0060 SPECIAL 08. LIGHTING CONTROL CABINET	1.000 EACH		.		.
1320	SPV.0060 SPECIAL 09. PROTECTIVE BOLLARDS	3.000 EACH		.		.
1330	SPV.0060 SPECIAL 10. CLEANING CULVERT PIPES MINIMAL	21.000 EACH		.		.
1340	SPV.0060 SPECIAL 11. CLEANING CULVERT PIPES FULL	15.000 EACH		.		.
1350	SPV.0090 SPECIAL 01. WATER MAIN DUCTILE IRON 8-INCH	643.000 LF		.		.
1360	SPV.0090 SPECIAL 02. WATER SERVICE COPPER 1-INCH	377.000 LF		.		.
1370	SPV.0090 SPECIAL 03. SAWING PAVEMENT	2,342.000 LF		.		.
1380	SPV.0090 SPECIAL 04. PULLBOX DRAIN DUCT	115.000 LF		.		.
1390	SPV.0090 SPECIAL 05. CONCRETE CURB AND GUTTER CURE AND SEAL TREATMENT	11,242.000 LF		.		.
1400	SPV.0105 SPECIAL 01. ABANDONING WATER MAIN	LUMP	LUMP			.

CONTRACT: 20130312037 PROJECT(S): 8160-14-71 FEDERAL ID(S): N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1410	SPV.0105 SPECIAL 02. PREPARE FOUNDATION FOR ASPHALTIC PAVING SPECIAL	LUMP	LUMP			.
1420	SPV.0105 SPECIAL 03. MATERIAL TRANSFER VEHICLE	LUMP	LUMP			.
1430	SPV.0105 SPECIAL 04. TEMPORARY WEDGE JOINT	LUMP	LUMP			.
1440	SPV.0165 SPECIAL 01. REMOVE AND RESTORE TERRACE PAVERS	70.000 SF		.		.
1450	SPV.0165 SPECIAL 02. CONCRETE SIDEWALK CURE AND SEAL TREATMENT	20,576.000 SF		.		.
1460	SPV.0165 SPECIAL 03. PAVEMENT MARKING CROSSWALK EPOXY 36-INCH SPECIAL	1,968.000 SF		.		.
1470	SPV.0170 SPECIAL 01. REHEATING HMA PAVEMENT LONGITUDINAL JOINTS SPECIAL	250.000 STA		.		.
1480	SPV.0195 SPECIAL 01. HMA PAVEMENT TYPE SMA SPECIAL	5,834.000 TON		.		.
1490	SPV.0195 SPECIAL 02. SMA PAVEMENT COMPACTION ACCEPTANCE	5,834.000 TON		.		.
	SECTION 0001 TOTAL					.
	TOTAL BID					.

PLEASE ATTACH SCHEDULE OF ITEMS HERE