#### **HIGHWAY WORK PROPOSAL**

Wisconsin Department of Transportation

Proposal Number:

DT1502 10/2010 <u>COUNTY</u>	s.66.29(7) Wis. Stats. STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	<u>HIGHWAY</u>
Richland	1643-05-75		STH 171 - Richland Center City Limits 0.24 Miles East of STH 171 to Hive Drive	USH 14

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, \$ 100,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due	Firm Name, Address, City, State, Zip Code
Date: January 8, 2013 Time (Local Time): 9:00 AM	SAMPLE
Contract Completion Time	NOT FOR BIDDING PURPOSES
October 15, 2013	
Assigned Disadvantaged Business Enterprise Goal	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

Type of Work

(Signature, Notary Public, State of Wisconsin)

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

(Bidder Signature)

(Bidder Title)

(Print or Type Bidder Name)

(Date Commission Expires)

Notary Seal

For Department Use Only

Excavation common, HMA pavement, permanent signing, bridge de	ck overlay, box culvert replacement, and pavement marking.
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.

### **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 <a href="http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm">http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm</a>. 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<sup>™</sup> on-line bidding exchange at <a href="http://www.bidx.com/">http://www.bidx.com/</a> 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.
- <sup>(4)</sup> Interested parties can subscribe to the Bid Express<sup>™</sup> 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 <a href="http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm">http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm</a> 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<sup>™</sup> web site.
- 2. Use Expedite<sup>™</sup> software to enter a unit price for every item in the schedule of items.
- 3. Submit the bid according to the requirements of Expedite<sup>™</sup> software and the Bid Express<sup>™</sup> 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

- Download the latest schedule of items from the Wisconsin pages of the Bid Express<sup>™</sup> web site reflecting the latest addenda posted on the department's web site at <a href="http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm">http://www.dot.wisconsin.gov/business/engrserv/bid-letting-information.htm</a>. Use Expedite <sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> generated schedule of items is not the same on each page.
  - 2. The check code printed on the printout of the Expedite<sup>™</sup> 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

- <sup>(1)</sup> 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."
- <sup>(3)</sup> In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:
  - 1. The bidder fails to provide the written request for waiver of the electronic submittal requirements.
  - 2. The bidder fails to pay the \$75 administrative fee before the time the department designates for the opening of bids unless the bidder requests on the waiver that they be billed for the \$75.
  - 3. The bidder exceeds 4 waivers of electronic submittal requirements within a calendar year.
- (4) In addition to the reasons specified in section 102 of the standard specifications, the department may refuse to issue bidding proposals for future contracts to a bidding entity that owes the department administrative fees for a waiver of electronic submittal requirements.

### **PROPOSAL BID BOND**

DT1303 1/2006

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 co	ondition 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)	(Name of Surety) (Affix Seal)
(Company Name)	(Signature of Attorney-in-Fact)
(Signature and Title)	
NOTARY FOR PRINCIPAL	NOTARY FOR SURETY
(Date)	(Date)
State of Wisconsin ) ) ss.	State of Wisconsin ) ) ss.
County )	County )
On the above date, this instrument was acknowledged before me by the named person(s).	On the above date, this instrument was acknowledged before me by the named person(s).
(Signature, Notary Public, State of Wisconsin)	(Signature, Notary Public, State of Wisconsin)
(Print or Type Name, Notary Public, State of Wisconsin)	(Print or Type Name, Notary Public, State of Wisconsin)
(Date Commission Expires)	(Date Commission Expires)
Notary Seal	Notary Seal

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

### **CERTIFICATE OF ANNUAL BID BOND**

DT1305 8/2003

Time Period Valid (From/To)
Name of Surety
Name of Contractor
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)

### 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	<b>Class of Work</b>	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.
- 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 1643-05-75, USH 14 rehabilitation from STH 171 to the Richland Center City Limits in Richland 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 milling asphaltic pavement, rubbilizing concrete pavement, guardrail removal and placement, box culvert repairs, box culvert replacements, a bridge deck overlay, rock excavation, base aggregate, HMA pavement, permanent signing and 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.

Provide the time frame for construction of the project within the 2013 construction season to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure that the time frame is consistent with the contract completion time. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the beginning of the approved time frame.

No in stream work restrictions have been placed upon the project. WDNR has said that time restrictions will depend upon construction method. The contractor shall contact the WDNR prior to submitting the erosion control implementation plan to obtain approval of the proposed construction schedule.

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

The Department of Natural Resources must be contacted 2 to 3 months prior to construction of culvert C-52-166. All work on culvert C-52-166 shall be completed by August 15, 2013.

All HMA pavement paving operations shall be completed prior to October 11, 2013.

Do not commence work under this contract until the required traffic control devices and markings are in place and the engineer approves the installations.

### **Migratory Birds**

Swallow and other migratory birds' nests have been observed on or under the existing bridge. All active nests (when eggs or young are present) of migratory birds are protected under the federal Migratory Bird Treaty Act.

The nesting season for swallows and other birds is usually between May 1 and August 30. Either prevent active nests from becoming established, or apply for a depredation permit from the US Fish and Wildlife Service for work that may disturb or destroy active nests. The need for a permit may be avoided by removing the existing bridge structure prior to nest occupation by birds, or clearing nests from all structures before the nests become active in early spring. As a last resort, prevent birds from nesting by installing a suitable netting device on the remaining structure prior to nesting activity. Include the cost for preventing nesting in the cost of Removing Old Structure.

### 4. Traffic.

USH 14, on which this project is located, shall remain open to two-way through vehicular traffic throughout the project length. Conduct operations in a manner that will cause the least interference to traffic movements and farm, business, and residential access adjacent and within the construction areas.

Maintain vehicular access along USH 14 at all times for all emergency vehicles. Maintain access to all farms, farm fields, businesses, and residential properties at all times unless approved by the engineer. When construction operations will temporarily restrict access to a property, coordination shall be made with the owner or resident at least 48 hours prior to the work beginning.

Stage 1 consists of removing and replacing guardrail and removing, replacing or rehabilitating existing drainage structures, extending cross culverts and all other related items as shown in the project plans in order to prepare the roadway for the paving operations. Stage 1 will also include the structure overlay at bridge B-52-32. Traffic control shall be in accordance to standard detail drawing "Traffic Control, Work on Shoulder or Parking Lane, Undivided Roadway" and other related details in the project plans.

Work on bridge B-52-32 and on culverts requiring total replacement that are crossing USH 14 shall have the roadway reduced to a single lane of traffic during daylight hours. Both lanes of USH 14 shall be reopened to vehicular traffic at the end of each day with a minimum roadway width of 24 feet prior to and during nighttime hours. The excavated portion of USH 14 shall have temporary asphalt placed within 72 hours of the culvert being completed. Traffic control shall be in accordance to standard detail drawing "Traffic Control for Lane Closures (Suitable for Moving Operations).

The second stage will consist of completing the reconstruction area near Tuck-A-Way Valley Road and the removal of culvert C-52-30 and the construction of culvert B-52-166. All work required on the culverts for the westbound driving lanes in the divided section will be completed at this time. Additional work in the westbound lanes of the divided section consists of milling the existing asphaltic surface, rubbilizing the underlying concrete pavement, relaying the milled asphaltic surface, placing the proposed HMA pavement, placing base aggregate shoulders, rock excavation and other miscellaneous items as shown in the plans to complete the project. All milled pavement surfaces must be repaved within 72 hours of the initial milling operation unless otherwise allowed in writing by the engineer.

Stage 3 construction will occur in the east bound lanes of the divided section of USH 14 and in the two lane rural sections on the east and west ends of the project. This work consists of milling the existing asphaltic surface, rubbilizing the underlying concrete pavement, relaying the milled asphaltic surface, placing the proposed HMA pavement, placing base aggregate shoulders, and other miscellaneous items as shown in the plans to complete the project. All milled pavement surfaces must be repaved within 72 hours of the initial milling operation unless otherwise allowed in writing by the engineer.

USH 14 may have the roadway reduced to a single lane of traffic during daylight hours where required by contractor operations. Traffic control shall be in accordance to the standard detail drawing "Traffic Control for Lane Closure Suitable for Moving Operations) to provide for construction of the roadway surface. Both lanes of USH 14 shall be reopened to vehicular traffic at the end of each day with a minimum roadway width of 24 feet prior to and during nighttime hours. At the end of each working day, both travel lanes termini shall be as adjacent as practical or within a maximum of 500 feet of the adjacent travel lane of the relay operation or the HMA pavement placement. There shall be no drop offs greater than 2-inches between lanes during nighttime hours.

Traffic control drums have been included in this contract; use them to delineate drop offs and other hazards such as shoulder work, intersection disturbance, beam guard removals, and other hazards within the work zone areas. Do not remove beam guard until subsequent operations requires removal in order to perform the work.

Maintain access at all abutting properties at all times. Side road access shall be maintained at all times except at Tuck-Away Valley Road which will be closed for the box culvert replacement and roadway reconstruction.

All mainline surfaces shall have at least one layer of HMA pavement over holiday weekends.

At the end of each working day, leave the entire corridor traffic control system in a condition to safely handle two-way operation along USH 14 and intersecting roadways.

A detour is not planned for this project.

The contractor shall cease or alter their work operations if traffic delays become longer than 15 minutes. If the contractor fails to comply with this special provision within a timely manner the engineer shall suspend work operations in accordance to Subsection 108.6 until the contractor complies with the 15 minute delay period. If the contractor continues operations, Standard spec 105.3.2.3 (Unauthorized Work) may be enforced for any work completed during that time, no additional compensation or additional time will be allowed due to such suspension of operations

Use signs to designate all areas as no-passing zones during the time when no-passing zone and centerline pavement markings are not in place on intermediate or final surfaces open to through traffic, including milled surfaces. Such signs shall be removed following placement of the no-passing zone and centerline pavement markings. Signs may be placed on portable supports unless the sign will be used continuously at the same location for seven or more days. The following signs shall be used:

- 1. "No Center Stripe (W8-12, 48" x 48" minimum) and "Do Not Pass" (R4-1, 24" x 30") at the beginning of the unmarked area, at one-mile intervals throughout the unmarked area, and at locations where traffic enters the unmarked area from intersections with state trunk and county trunk highways.
- 2. "Low Shoulder" signs (W8-9, 48" x 48" minimum) shall be in place at one mile spacing anytime shoulders do not match the adjacent traveling surface.
- 3. "Loose Gravel" signs (W8-7, 48" x 48" minimum) shall be placed at one mile spacing anytime USH 14 traffic is operating on gravel.
- 4. "Bump" signs shall be placed at each location a vertical drop of one-inch or more is present on USH 14.

# 5. Public Convenience and Safety.

*Revise standard spec 107.8(6) as follows:* 

Check for and comply with local ordinances governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 8:00 PM until the following 7:00 AM, unless prior written approval is obtained from the engineer. 107-001 (20060512)

### 6. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying USH 14 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From Noon Friday May 24<sup>,</sup> 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 August 30, 2013 to 6:00 AM Tuesday September 3, 2013 for Labor Day.

Barricades, drums and signs required to maintain traffic flow patterns and driver safety will be allowed in the USH 14 roadway corridor.

### 7. Mill, Rubblize and Relay Operation.

The mill, rubblize, and relay operation shall follow the steps outlined below unless otherwise allowed by the project engineer.

- 1) Remove existing asphaltic surface from the concrete pavement with milling operations and place on shoulders.
- 2) Rubblize the existing concrete pavement.
- 3) Blade the milled asphaltic pavement back on top of the rubblized concrete as required.

### Replace standard spec 325.3(2) and 30.3(2) with the following:

Follow the outlined steps above. Immediately after the rubbilizing operation of the concrete pavement is complete, relay the milled material with a paver, grader or both a paver and grader. The milled material may be incorporated together during the relaying operations as needed. Use equipment with automatic grade and slope control systems for adjusting the slope through super-elevated curves, transitions, and tangent sections and an averaging device to achieve a smooth profile. If the automatic control systems break down, the contractor may use manual controls for the remainder of that day only.

### 8. Utilities.

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

There are utilities with potential overhead and underground facility conflicts within the project area. The contractor shall coordinate his construction activities with a call to Diggers Hotline or a direct call to the utilities that have facilities in the area as required by statues. The contractor shall use caution to ensure the integrity of underground facilities and shall maintain code clearances from overhead facilities at all times.

The following is a list of utilities with facilities within the project limits:

Alliant Energy: No conflicts are anticipated. Use caution in areas of existing facilities.

**Charter Communications:** Will directional bore a relocated crossing at approximately Station 336+00. Relocation will be completed prior to construction.

**Dairyland Power Cooperative**: No conflicts are anticipated. Use caution near Station 34+90 and maintain clearances with overhead electric crossing.

Genuine Telecom: No conflicts are anticipated.

**City Utilities Richland Center:** There are no conflicts with the existing watermain located from Station 325+55 RT to the east end of the project. There are no conflicts with the existing sanitary sewer. A new sanitary sewer crossing will be placed at approximately Station 338+15 during construction. Contractor shall coordinate with utility.

**Richland Electric Cooperative:** A temporary relocation is required at Station 215+00 for the installation of new box culvert C-52-166. A potential overhead relocation is required at Station 84+60. This work will take place during construction and is expected to take three working days to complete. Larry Hallett, (608) 647-3173.

**Richland Grant Telephone Cooperative**: No conflicts. All facilities are east of the existing project limits.

Town and Country TV and Appliance: No conflicts. All facilities are east of the existing project limits.

**Frontier Communications:** Two cables will be replaced between Stations 214+50 and 215+20 prior to construction.

WE Energies: No conflicts are anticipated. Use caution in areas of existing facilities.

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

The department has obtained a U.S. Army Corps of Engineers Section 404 permit. Comply with the requirements of the permit in addition to requirements of the special provisions. A copy of the permit is available from the regional office by contacting Robert Winterton, PE at (608) 789-7879. 107-054 (20080901)

## 10. Construction Over or Adjacent to Navigable Waters.

Supplement standard spec 107.19 with the following:

The east branch of Mill Creek is classified as a navigable waterway. 107-060 (20040415)

### 11. Abatement of Asbestos Containing Material B-52-32, Item 203.0210.S.

### **A Description**

This special provision describes abating asbestos containing material on structures in accordance to the plans, the pertinent provisions of the standard specifications, and as hereinafter provided.

### **B** (Vacant)

### **C** Construction

James Gondek, License Number AII-108099, inspected Structure B-52-32 for asbestos on March 7, 2007 Regulated Asbestos Containing Material (RACM) was found on this structure in the following locations and quantities:

Material:	Grey Gasket
Location:	Guardrail attachment to parapet and parapet expansion joint
Туре:	Non-friable asbestos
Quantity:	Guardrail attachment to parapet = $10 \text{ SF} (40 \text{ Each of } 6^{\circ}\text{x}6^{\circ});$
	Parapet expansion joint = 16 LF (4 joints at 4 feet long)

The RACM on this structure must be abated by a licensed abatement contractor. A copy of the inspection report is available from Robert Winterton at (608) 789-7879. In accordance with NR447 and DHS159, ensure that DNR or DHS receives a completed Notification of Demolition and/or Renovation (DNR Form 4500-113 (R 4/11), or subsequent revision) via U.S. mail, hand-delivery, or using the online notification system at least 10 working days prior to beginning any construction or demolition. Pay all associated fees. Provide a copy of the completed 4500-113 form and the abatement report to Steve Vetsch, 3550 Mormon Coulee Rd., LaCrosse, WI 54601 and DOT BTS-ESS Attn: Hazardous Materials Specialist PO Box 7965, Madison, WI. 53707-7965. In addition, comply with all local or municipal asbestos requirements.

Use the following information to complete WisDNR form 4500-113 :

- Site Name: Structure B-52-32, US 14 over East Branch of Mill Creek
- Site Address: Section 17 Town 10N Range 01W, Town of Dayton, Richland County
- Ownership Information: WisDOT Southwest Region, 3550 Mormon Coulee Rd., La Crosse, WI 54601.
- Contact: Robert Winterton
- Phone: (608) 789-7879
- Age: 52 years old. This structure was constructed in 1961.
- Area: 3688 SF of deck

Insert the following paragraph in Section 6.g.:

• If asbestos not previously identified is found or previously non-friable asbestos becomes crumbled, pulverized, or reduced to a powder, stop work immediately, notify the engineer, and the engineer will notify the department's Bureau of Technical Services at (608) 266-1476 for an emergency response in accordance to standard spec 107.24. Keep material wet until it is abated or until it is determined to be non-asbestos containing material.

### **D** Measurement

The department will measure Abatement of Asbestos Containing Material (Structure), completed in accordance to the contract and accepted, 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
203.0210.S	Abatement of Asbestos Containing Material Structure	LS
	B-52-32	

Payment is full compensation for submitting necessary forms; removing all asbestos; properly disposing of all waste materials; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the contract work. 203-005 (20120615)

### **12.** Erosion Control Structures.

Within seven calendar days after the commencement of work on the bridge superstructure, place all permanent erosion control devices, including riprap, erosion mat, ditch checks, seed, fertilizer, mulch, soil stabilizer, or any other item required by the contract or deemed necessary by the engineer. These devices shall be in place in the area under the bridge and on both sides of the roadway, from the waterway to a point 100-feet behind the backwall of the abutment. Within said limits, place these devices to a height equivalent to the calculated water elevation resulting from a storm that occurs on the average of once every two years (Q2) as shown on the plan, or as directed by the engineer. Prior to initial construction operations, place turbidity barriers, silt screens, and other temporary erosion control measures as shown on the plans, and remove them after the permanent erosion control devices are in place unless directed otherwise by the engineer.

In the event that construction activity does not disturb the existing ground below the Q2 elevation, the above timing requirements for permanent erosion control shall be waived. 107-070 (20030820)

### 13. Base Aggregate Dense, <sup>3</sup>/<sub>4</sub>-Inch.

This work shall be in accordance to the pertinent requirements of standard spec 305, except that the material used in all unpaved field entrances and private entrances and the top 4.5 inches of all unpaved portions of shoulders, as shown in the plan, shall consist of crushed stone.

# 14. Base Aggregate Dense, 1 <sup>1</sup>/<sub>4</sub>-Inch.

Revise standard spec 305.2.2.1 as follows:

Use 1 <sup>1</sup>/<sub>4</sub> base aggregate that conforms to the following gradation requirements:

	Percentage of Mass Passing
1 1/4 inch	95 - 100
1 inch	
3/4 inch	70 - 90
3/8 inch	45 - 75
No. 4	30 - 60
No. 10	20 - 40
No. 40	7 - 25
No. 200	2 - 12 [1], [3]

Percentage by weight passing

- <sup>[1]</sup> Limited to a maximum of eight percent for base placed between old and new pavement.
- <sup>[3]</sup> 3 10 percent passing when base is  $\geq$  50% crushed gravel

# **15. MGS Type 3.**

Radii tighter than 75 feet shall be shop bent by the manufacturer prior to delivering the Steel Thrie Beam to the project site.

# 16. Grading, Shaping and Finishing Intersection Pier Spring Road, Item 205.9015.S.01, Saloutus Lane, Item 205.9015.S.02, Spring Valley Road, Item 205.9015.S.03, and Covered Bridge Road, Item 205.9015.S.04.

### A Description

This special provision describes excavating, filling, grading, shaping, compacting, and finishing as necessary to construct the intersection as shown on the plans and in accordance to the pertinent requirements of the standard specifications and as hereinafter provided.

### **B** (Vacant)

### **C** Construction

Dispose of all surplus and unsuitable material in accordance to standard spec 205.3.12.

### **D** Measurement

The department will measure Grading, Shaping, and Finishing Intersection (Location) 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
205.9015.8.01	Grading, Shaping, and Finishing Intersection Pier Spring	LS
	Road	
205.9015.S.02	Grading Shaping and Finishing Intersection Saloutus Lane	LS
205.9015.S.03	Grading Shaping and Finishing Intersection Spring Valley	LS
	Road	
205.9015.S.04	Grading Shaping and Finishing Intersection Covered	LS
	Bridge Road	

Payment is full compensation for furnishing all excavating, grading, shaping, and compacting; and for providing and placing fill, topsoil, fertilizer, seed, and mulch.

The base course and surfacing items will be measured and paid for under the pertinent items provided in the contract. 205-015 (20060512)

### 17. General Requirements for Blasting Rock.

Supplement standard spec 205.3.7 as follows:

Perform all blasting in compliance with the Wisconsin Administrative Code, Chapter COMM 7.

### **Blasting Plan Submittal**

Not less than two weeks prior to commencing blasting operations, or at any time when changes to the drilling and blasting methods are proposed, submit a Blasting Plan to the engineer for review. The blasting plan shall contain full details of the drilling and blasting patterns and controls proposed for both the controlled and production blasting. Include the following minimum information in the blasting plan:

- 1. Station limits of proposed shot.
- 2. Plan and section views of proposed drill pattern including free face, burden, blasthole spacing, blasthole diameters, blasthole angles, lift height, and subdrill depth.
- 3. Loading diagram showing type and amount of explosives, primers, initiators, and location and depth of stemming.
- 4. Initiation sequence of blastholes including delay times and delay system.
- 5. Manufacturer's data sheets for all explosives, primers, and initiators to be employed.

The blasting plan submittal is for quality control and record keeping purposes. Review of the blasting plan by the engineer does not relieve the contractor of responsibility for the accuracy and adequacy of the plan when implemented in the field.

### Safety

Immediately notify the engineer of any incidents of fly rock, damage to any personal property, or existing roadway that is open to traffic, and any violations of the COMM 7 statute. Failure to do so shall be considered a safety violation under standard spec 107 and all work on the project may be stopped under standard spec 105.1(1).

Notify the engineer of the station, location, and 'size' of all blasts at least one hour prior to the blast.

Observe the entire blast area for a minimum of five minutes following a blast to guard against rock or debris fall before commencing work in the area.

The engineer has the authority to prohibit or halt the contractor's blasting operations if it is apparent that through the methods being employed, the required slopes are not being obtained in a stable condition, the safety and convenience of the traveling public is being jeopardized, or vibration levels above the allowable levels occur.

### **Condition Surveys**

Conduct and document pre-blast and post-blast surveys of any nearby buildings or structures as required by the scaled-distance equation specified in chapter COMM 7.61 of the Wisconsin Administrative Code. Make right of entry arrangements with the property owners for these condition surveys. Prior to any blasting, make the pre-blast survey records available to the engineer for review. After completion of blasting operations, perform a post-blast survey and make these records available to the engineer for review. The contractor shall be responsible for any damage resulting from blasting.

These condition surveys shall consist of visually inspecting and recording all existing defects in the structures before and after blasting operations. Photographs and/or videotape may be used to assist in documentation. Submit a written report to the department detailing the visual and photographic investigation of potentially affected structures. This report will include copies of the pre-blast and post-blast surveys and discuss any discrepancies and findings of these surveys.

If at any time during the progress of the work, the methods of drilling and blasting do not produce the desired result of a uniform slope and shear face, within the tolerances specified, drill, blast, and excavate in short sections, not exceeding 100 feet in length, until a technique is arrived at that will produce the desired results. Extra cost resulting from this requirement shall be borne by the contractor.

### Vibration Control and Monitoring

All vibration control and monitoring shall comply with COMM 7.63, Instrumentation and COMM 7.64, Control of Adverse Effects.

Whenever there is a potential for vibration damage to adjacent buildings, structures, or utilities, monitor each blast with an approved seismograph located, as approved, between the blast area and the closest structure subject to blast damage, and as close as practical to the subject structure. Peak particle velocity shall not be allowed to exceed the safe limits of the nearest structure subject to vibration damage.

A vibration specialist, approved by the engineer, shall perform vibration monitoring. The vibration specialist shall monitor vibration levels according to chapter COMM 7.64(4) of the Wisconsin Administrative Code and interpret the seismograph records to ensure that the seismograph data shall be effectively utilized in the control of the blasting operations with respect to the existing structures and utilities.

According to chapter COMM 7.64(4) - 2 of the Wisconsin Administrative Code consult with the owner of any structure or utility not listed in chapter COMM 7.64(4) - 1 to establish maximum allowable limits on ground vibrations. In no case shall these vibration limits exceed the following criteria:

Structure Type	Maximum Peak Particle Velocity (inches/second)
Reinforced Concrete, Structures, Unoccupied	4.0
Steel Structures, Unoccupied	4.0
Buried Utilities	2.0
Wells and Aquifers	2.0
Green Concrete (Less than 7 days)	1.0

Furnish data recorded for each shot to the engineer prior to the next blast; the data shall include the following:

- 1. Identification of vibration monitoring instrument used.
- 2. Name of qualified observer and interpreter.
- 3. Distance and direction of recording station from blast area.
- 4. Type of ground at recording station and material on which the instrument is sitting.
- 5. Peak particle velocity and principal frequency in each component.
- 6. A dated and signed copy of records of seismograph readings.
- 7. A comparison of measured seismograph readings to maximum allowable readings identified in chapter COMM 7 of the Wisconsin Administrative Code or as specified in this special provision.

If the recorded vibration data exceeds the allowable levels established in chapter COMM 7 of the Wisconsin Administrative Code or as specified in this special provision, immediately halt blasting operations. Submit a revised blasting plan to the engineer and do not resume blasting operations until the engineer approves the revised plan.

All costs associated with the work described herein shall be considered included in the bid item Excavation Rock. 205-050 (20080902)

### 18. Temporary Shoring, Item 206.6000.S.

### A Description

This special provision describes designing and providing temporary shoring at locations the plans show.

### **B** Materials

### **B.1 Shoring Design**

Provide a shoring design for each location where the plan requires temporary shoring. Have a professional engineer, registered in the State of Wisconsin and knowledgeable of the specific site conditions and requirements, verify the adequacy of the design. Submit one copy of each shoring design, signed and sealed by the same professional engineer verifying the design, to the engineer for incorporation into the permanent project record.

### C Construction

Provide temporary shoring at each required location conforming to the design developed for that location.

Remove the shoring when it is no longer needed unless the engineer allows it to remain in place. Backfill the space that is excavated but not occupied by the new permanent construction conforming to standard spec 206.3.13.

### **D** Measurement

The department will measure Temporary Shoring by the square foot acceptably completed at locations the plans show, measured as the area of exposed face in the plane of the shoring from the ground line in front of the shoring to a maximum of one foot above the retained grade. Shoring used for staged construction in multiple configurations without removal and reinstallation will be measured once based on the configuration with the largest area of exposed face.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
206.6000.S	Temporary Shoring	SF

Payment is full compensation for designing and providing shoring; for providing a signed and sealed copy of the design; and for backfilling and removing the shoring.

The department will not pay for temporary shoring, installed for contractor convenience, that is not required in the plans. 206-005 (20110615)

### **19. 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
$\leq$ 1500 tons	One test from production, load-out, or
	placement at the contractor's option <sup>[1]</sup>
$>$ 1500 tons and $\leq$ 6000 tons	Two tests of the same type, either from production, load-out, or placement at the contractor's option <sup>[1]</sup>
$> 6000$ tons and $\le 9000$ tons	Three placement tests <sup>[2][3]</sup>

- <sup>[1]</sup> 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.
- <sup>[2]</sup> For 3-inch material, obtain samples at load-out.
- <sup>[3]</sup> 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:

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

<sup>[1]</sup> 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/engrsery/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 3inch 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)

# 20. QMP HMA Pavement Nuclear Density.

# A Description

Replace standard spec 460.3.3.2 (1) and 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: <u>http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm</u>
- (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 <u>http://www.dot.wisconsin.gov/business/engrserv/approvedprod.htm.</u>
- (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<sup>3</sup>. 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<sup>3</sup> 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<sup>3</sup> 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<sup>3</sup> 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	<b>Transverse Location</b>
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
	Tab	ole 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,	Minimum Number
Roundabouts: Sublot/Layer tonnage	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<sup>3</sup> of the QC sublot average, use the QC tests for acceptance.
- <sup>(5)</sup> If the first QV/QC sublot average comparison shows a difference of more than 1.0 lb/ft<sup>3</sup> 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<sup>3</sup>, use the original QC tests for acceptance.
- (6) If the QV and QC sublot averages differ by more than 1.0 lb/ft<sup>3</sup> 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 noncorrelated 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)

# 21. Sheet Membrane Waterproofing, Item 516.0600.S.

# A Description

This special provision describes preparing the surface, furnishing and installing a primer, waterproofing membrane, and hot rubberized sealer or mastic, or both, on the bridge decks to be overlaid with asphaltic concrete as shown on the plans.

### **B** Materials

### **B.1 Waterproofing System**

Provide a material in the waterproofing system that is specifically designed for use with an asphaltic concrete overlay. The membrane shall consist of a cold-applied, selfadhering membrane incorporating a heat resistant woven or non-woven fabric or fiberglass reinforcing laminated in between layers of polymer modified bitumen or SBS modified rubberized asphalt. The membrane shall have a release film, polyester or polyethylene on the down side and may have a thin spun bonded open weave polyester fabric on the up side that will bond with the asphaltic concrete overlay; yet will permit driving rubber-tired trucks, pavers and other construction vehicles on the membrane covered bridge deck. Provide a composite sheet membrane with the following properties:

Property	Test Method	Specific Value
Width		36 inch min.
Tensile Strength	ASTM D 412	50 lb/in or 700 psi min.
Thickness		60 mils to 80 mils
Puncture Resistance	ASTM E 154	40 lb. min.
Permeance	ASTM E 96, Method B	0.05 US Perms max.
Low Temperature Pliability	ASTM D 146, 1-inch Mandrel	No cracks or splits at 180°
	@ -25° F	bend
Water Absorption	ASTM D570, 72 hr.	0.25% max.
Peel Adhesion	ASTM D 903	5 lb/in width min.
Crack Cycling @ -15° F, 10	ASTM C836	No cracks or splits
cycles		
Compound Softening Point	ASTM D 36	$210^{\circ} \text{ F} \pm 20^{\circ} \text{ F}$
Viscosity of Membrane	ASTM D 4402	3500 centipoise
Rubberized Asphalt, @		-
329° F		
1 , 0		

Provide rubberized asphalt compound containing not more than 15% inorganic residue or filler material.

Provide primer, mastic and/or hot rubberized asphalt sealer conforming to the specified properties required by the manufacturer of the waterproofing membrane.

### **B.2 Materials Certification**

Prior to membrane approval for initial submittals and/or upon reformulation of membrane material compounds, submit to the engineer a notarized certification by an independent test laboratory stating that the materials conform to the requirements of these specifications. The certification shall include or have attached specific results of tests performed on the material supplied. The engineer may at his option require samples of any material for testing. Prior approval membranes will be provisionally accepted by manufacturer's certification on their company letterhead, but may be subject to control and/or approval by subsequent testing.

### **C** Construction

## C.1 Application Methods

Apply materials in strict accordance to the manufacturer's instructions. In order to install the waterproofing membrane, the deck temperature shall be a minimum of 45° F and rising. Before applying the system, become acquainted with the materials specified and their handling characteristics and become thoroughly familiar with the construction procedures recommended by the manufacturer. Furnish a copy of the recommended procedures to the engineer. To establish procedures for maintaining optimum working conditions and to coordinate work related to adjacent construction, a pre-installation conference with a manufacturer's representative shall be held prior to starting construction. To provide quality assurance that the membrane has been properly installed, a manufacturer's representative familiar with the membrane installation procedures shall be present during placement of the membrane.

Clean and make free of asphaltic patches, fast setting concrete patches, and all spalled, unsound or disintegrated areas of concrete the entire deck area of the structures being overlaid including curbs and parapets. Provide a minimum cure time of three days for repaired areas before resuming construction operations on the deck, and provide a minimum cure time of seven days before placing the membrane. Repairing these areas with concrete masonry deck patching, concrete surface repair or curb repair will be paid for separately. Prior to placing the membrane, prepare the surface of the entire deck surface areas of the structures by shot blast cleaning.

The shot blast cleaning shall include the vertical face of the curbs or parapets to the height of the specified finish pavement surface and elevation. The shot blasting machine used for this procedure shall be capable of propelling steel shot against the deck surface in a uniform method to remove all foreign material and loose concrete. The shot blasting operation shall include collection and disposal of used steel shot and dust. As per manufacturer's recommendations, all pavement-marking lines within the cleaning area shall be sufficiently removed to prevent bleeding through the primer. After shot blasting operations, remove by sweeping, compressed air blasting, pressure washing with water or by other satisfactory means any foreign material remaining on the concrete deck. The deck shall be clean, dry and free from mud, dirt, sand, oil or grease and any other contaminants prior to application of the primer. No vehicles or equipment will be permitted on the concrete deck after surface preparation except those necessary for the installation of the waterproofing membrane. The engineer will inspect the concrete deck prior to the application of the primer. Do not begin application of either the primer or membrane until after the engineer grants approval.

To coat all surfaces of the deck, curb and/or parapet that will be covered with the membrane, apply primer uniformly as recommended by the manufacturer. Use roller, brush or spray to apply primer to the surfaces. If spraying is used, an approved method of protecting the environment is required.

Allow the primer to dry until tack free (approximately forty-five minutes) before applying the membrane. Apply primer only to an area that will be covered with the membrane within the same calendar day. If the surface of the concrete deck becomes contaminated, clean and reprime the area.

Apply primer on the curb faces, raised deck drains and expansion joints to the top of the proposed asphaltic concrete overlay. Take care to ensure that all inside corners are coated with primer.

After the primer has dried to a tack free condition, apply one layer of membrane to the deck starting on the low side edge.

To form a bond with the primed deck, remove the release film from the membrane on the tacky side while the membrane is rolled face down. Apply the membrane by hand methods or by using mechanical applicators. Overlap a minimum of 2.5 inches at the edges of each strip and overlap the membrane in such a manner to provide a shingling effect toward the low side of the deck cross section. Overlap a minimum of 5 inches at the ends of each strip of membrane and overlap the membrane in such a manner to provide a shingling effect toward the lower side of the deck profile. Roll the entire membrane surface with a rubber tire roller to ensure firm and uniform contact with the primed surface. Use special care to ensure that the membrane is uniformly adhered to the concrete. The entire membrane shall be free of wrinkles, air bubbles, and other placement defects. In the event bubbles or blisters do form under the membrane, puncture the bubbles or blisters with a sharp pointed instrument such as an awl and press the membrane firmly into contact with the deck. Repair any membrane punctures, tears, holes, and misaligned or inadequate seams with a patch of waterproofing membrane sized as required to ensure water tightness. Apply membrane flashing to raised deck drains and expansion joints and cut, fit and seal the membrane flashing with mastic or by heat sealing.

Apply the primer and membrane to an area at least 6 inches wider than will be paved with asphalt to provide a lap with subsequent application of primer and membrane when required in order to accommodate traffic control staging. Cover the inside corners of curbs or parapets and all other perimeter edges with narrow strips (flashing strips of approximately 12 inches), hot rubberized sealer, or mastic in accordance with manufacturer guidelines. As an additional method of ensuring a watertight bond, all terminating edges, transverse overlaps and longitudinal overlaps may be heated with a propane torch to soften the top mat and fuse the surfaces together.

The applicator foreman or leadworker shall be certified by the manufacturer of the waterproofing membrane as approved applicators, and shall be present during all applications.

### C.2 Overlaying the Membrane with Asphaltic Concrete

Construct the asphaltic concrete overlay according to scheduling requirements elsewhere in the contract. Cover all exposed membrane with the specified asphaltic concrete mix within five days after installation. Only rubber-tired construction vehicles shall be permitted on the membrane. Use caution not to turn the tires when a vehicle is stationary. To prevent tearing the membrane, avoid sudden starts, stops, accelerations, or decelerations. Chemical solvents, gasoline, diesel fuel, mineral spirits, etc. shall not be spilled or leaked onto the membrane. Prior to covering the membrane with asphaltic concrete overlay, clean and dry the membrane of mud, dirt, sand, oil, grease, or any other contaminants, and dry the membrane. Patch contaminated areas as required by the engineer. When required to accommodate traffic control staging, the construction of the asphaltic concrete overlay shall stay at least six inches away from the terminating edge of the membrane to provide for overlap.

The placement temperature of the asphaltic concrete shall be between 300° F and 350° F. Do not place asphaltic concrete on the membrane outside this temperature range. The temperature of the uncompacted mat of asphaltic concrete shall not fall below  $280^{\circ}$  F prior to rolling. The thickness of the asphaltic concrete layers shall be as shown on the plans; the initial layer shall have a minimum compacted thickness of  $1\frac{1}{2}$  inches. The membrane applicator contractor shall have a minimum of one employee present during all asphaltic concrete paving operations to ensure that all necessary membrane repairs will be accomplished.

### **D** Measurement

The department will measure Sheet Membrane Waterproofing, installed in accordance to the contract and accepted, in area by the square yard. Measurement shall be based on the horizontal distance between the face of the curbs or parapets and the horizontal length of membrane installed. Any material specified to be applied up the face of the curb or parapet shall not be included in the measured quantity.

### **E** Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
516.0600.S	Sheet Membrane Waterproofing	SY

Payment is full compensation for furnishing and placing the primer, membrane, mastic, and hot rubberized asphalt sealer; and for preparing the surface. 516-060 (20110930)

# 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 0.26 miles (1373 feet).

"No Passing Zones" shall be located prior to any milling operations so that all temporary and permanent pavement markings are placed in the correct location. The contractor shall be responsible for maintaining and perpetuating the no passing zone and locations for the duration of the project.

# 23. Weir Plates, Item SPV 0060.01.

## A Description

This special provision describes fabricating, furnishing, delivering and installing all materials required for weir plates as shown on the plans, and as hereinafter provided.

### **B** Materials

Furnish structural carbon steel for weir plates that is according to the pertinent requirements of standard spec 506.

Galvanize weir plates according to ASTM A 123.

### C Construction

Provide weir plates and polyurethane caulk, as detailed on the plans and install per plan details.

### **D** Measurement

The department will measure Weir Plates by each unit, acceptably completed.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Weir Plates	Each

Payment is full compensation for furnishing, galvanizing and installing weir plates; and for furnishing and installing polyurethane caulk.

# 24. Masonry Anchors Type S 3/8-Inch, Item SPV.0060.02.

### A Description

This special provision describes furnishing and installing masonry anchors type S 3/8-inch for connection of weir plates as shown on the plans, and as hereinafter provided.

### **B** Materials

Furnish masonry anchors type S 3/8-inch that is according to the pertinent requirements of standard spec 502.

### **C** Construction

Provide the masonry anchors type S 3/8-inch as detailed in the plans and install per plan details.

### **D** Measurement

The department will measure Masonry Anchors Type S 3/8-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.0060.02	Masonry Anchors Type S 3/8-Inch	Each

Payment is full compensation for providing mechanical wedge anchors or adhesive anchors, including bolts, studs, nuts, washers and incidentals; for drilling holes; and for installing the anchors and necessary hardware.

# 25. Safety Grate Special, Item SPV.0060.03.

### A Description

This special provision describes furnishing and installing safety grates special on the end of the existing 3.5 'x 5' box culvert located at Station 189+40, left, as shown in the plans, and as hereinafter provided.

### **B** Materials

Furnish steel pipe material conforming to the requirements of ASTM A709 grade 36.

Furnish galvanized angles, brackets, masonry anchors and miscellaneous hardware according to the requirements of ASTM A709 grade 36 and ASTM A123. Prior to galvanizing, all steel material shall be given a No. 6 blast cleaning by S.S.P.C. specifications.

### **C** Construction

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

### **D** Measurement

The department will measure Safety Grate Special in units of work, where one unit is one grate, acceptably completed.

# E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Safety Grate Special	Each

Payment is full compensation for furnishing and installing all materials; and for drilling and connecting the grate to the existing box culvert.

# 26. Concrete Crack Sealing, Item SPV.0090.01.

### A Description

This special provision describes sealing all cracks in the culvert as shown on the plans and as hereinafter provided.

### **B** Materials

Provide a penetrating sealant that is listed on the department's approved product listing, "Low Viscosity Crack Sealers".

### C Construction

Clean the cracks to be sealed by the use of high pressure air after Concrete Surface Repairs are completed.

Pour the epoxy sealant into the cracks to be sealed.

At no expense to the department, clean all spills.

### **D** Measurement

The department will measure Concrete Crack Sealing in length by the linear foot of cracks sealed, acceptably completed.

### E Payment

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

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Concrete Crack Sealing	LF

Payment is full compensation for furnishing and placing the epoxy sealant, including any required cleaning.

# **ADDITIONAL SPECIAL PROVISION 4**

<u>Payment to all Subcontractors</u>. 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 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.
- <sup>(3)</sup> 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:

- <sup>(1)</sup> 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

#### 501.2.5.5 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 <sup>[1]</sup>
	Sampling fresh concrete	AASHTO R60
	Making and curing concrete compressive strength test specimens	AASHTO T23
	Compressive strength of molded concrete cylinders	AASHTO T22
[	<sup>1]</sup> As modified in CMM 8-60.	

#### 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:

<sup>(9)</sup> 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.
- <sup>(2)</sup> 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.
- <sup>(3)</sup> 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.

#### 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.
- <sup>(3)</sup> 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

<sup>(2)</sup> 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<sub>b</sub> 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:

SPECIES		WESTERN HEMLOCK, HEM-FIR, RED PINE, WHITE PINE, JACK PINE, PONDEROSA PINE		OAK			
MAXIMUM SLOPE OF GRAIN		1 in 15		1 in 12			
٦	NOMINA	_ WIDTH OF FACE	6"	8"	6"	8"	
SHA		GREEN	1"	1 3/8"	2 3/8"	3 1/8"	
CHECKS, AND SPLITS		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	2	MIDDLE 1/3 OF LENGTH	1 3/8"	1 5/8"	2 1/8"	2 3/8"	
	NOTS	NARROW FACE	END <sup>[1]</sup>	2 3/4"	3 1/4"	4 1/4"	4 3/4"
	Ž	SUM IN MIDDLE 1/2 OF LENGTH <sup>[2]</sup>	11"	13"	17"	19	
		EDGE KNOT N MIDDLE 1/3 OF LENGTH	1 3/8"	1 5/8"			
	UM AI	WIDE FACE	EDGE KNOT AT END <sup>[1]</sup>	2 3/4" 7	3 1/4"		
	EA(	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"	

TABLE 614-1 PROPERTIES FOR WOOD POSTS AND BLOCKS

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

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

<sup>(5)</sup> 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

<sup>(1)</sup> 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:

abile comonitie 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)

#### 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.

#### 715.3.1.3 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.

### <u>Errata</u>

Make the following corrections to the 2012 edition of the standard specifications:

#### **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).

#### 506.2.6.5.2 Pad Construction

<u>Correct errata by changing ASTM A570 to ASTM A1011.</u> (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 r ASTM A570 to ASTM A1011.

(1) Use toggle bolts made of steel, conforming to the plans. Make the assembly from the materia specified below:			
Toggle bolt and pin			
Toggle washer	Hot rolled steel ASTM A1011. Manufacturer's standard washer.		

S	pacer nut	Grade 121	3. ASTM A108.	Cold finished s	steel heat-treated ASTM A325.
0			0, 7, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,		

#### 660.2.1 General

(1) F

Correct errata by changing section 511 to 550.

Concrete	section 50
Concrete bridges	section 50
Luminaires	section 65
Steel piling	section 55
Steel reinforcement	section 50

#### 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 changing 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:

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

#### TABLE 701-2 TESTING STANDARDS

<sup>[1]</sup> As modified in CMM 8-60.

<sup>[2]</sup> As modified in CMM 8-70.

# **Effective with November 2006 Letting**

# **ADDITIONAL SPECIAL PROVISION 7**

- A. Reporting 1<sup>st</sup> 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.
  - 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: <u>http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm</u>

(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

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# WISCONSIN DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES

## SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

- I. Wage Rates, Hours of labor and payment of Wages
- II. Payroll Requirements
- III. Postings at the Site of the Work
- IV. Affidavits
- V. Wage Rate Redistribution
- VI. Additional Classifications

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

The schedule of "Minimum Wage Rates" attached hereto and made a part hereof furnishes the prevailing wage rates that have been determined pursuant to Section 103.50 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the various laborers, workers, mechanics and truck drivers employed by contractors and subcontractors on the construction work embraced by the contract and subject to prevailing hours and wages under Section 103.50, Stats. If necessary to employ laborers, workers, mechanics or truck drivers whose classification is not listed on the schedule, they shall be paid at rates conformable to those listed for similar classifications. Apprentices shall be paid at rates not less than those prescribed in their state indenture 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 RICHLAND 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	<u>TOTAL</u>
	\$	\$	\$
Bricklayer, Blocklayer or Stonemason	32.66	15.92	48.58
Carpenter	29.06	15.16	44.22
Cement Finisher	29.91	16.45	46.36
Future Increase(s): Add \$1.86 on 6/1/12; Add \$1.87 on 6/1/13; Add \$1	1.87 on 6/1/14; Ad	d \$1.87 on 6/1/1	5; Add
\$1.75 on 6/ 1/ 16. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra	te on Sunday, Nev	w Year's Day Me	morial
Day, Independence Day, Labor Day, Thanksgiving Day & Christmas I			
Department of Transportation or responsible governing agency requir	es that work be pe	erformed at night	
artificial illumination with traffic control and the work is completed afte	r sunset and befo	re sunrise.	
Electrician	37.25	14.68	51.93
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	26.04	13.13	39.17
Piledriver	29.56	15.16	44.72
Roofer or Waterproofer	16.75	5.75	22.50
Teledata Technician or Installer	21.26	11.75	33.01
Tuckpointer, Caulker or Cleaner	30.65	7.00	37.65
Underwater Diver (Except on Great Lakes)	36.20	18.81	55.01
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONI	LY 35.42	12.90	48.32
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	35.50	14.27	49.77
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

Page 2	
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TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	<u>TOTAL</u>
	\$	\$	\$
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 6/1/2 Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	on Sunday, New Ye	ear's Day, Memor	ial 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 6/1/2 Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	on Sunday, New Ye	ear's Day, Memor	ial Day,
Articulated, Euclid, Dumptor, Off Road Material Hauler Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$		18.90	45.67
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic Day, Independence Day, Labor Day, Thanksgiving Day & Christmas involving temporary traffic control setup, for lane and shoulder closu conditions is necessary as required by the project provisions (include such time period).	Day. 2) Add \$1.25/ ures, when work und ling prep time prior t	hr for work on pr	ojects nation
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 Future Increase(s): Add \$1.60/hr on 6/1/2012: Add \$1.70/hr on 6/1/20 Premium Pay: Add \$.10/hr for topman, air tool operator, vibrator or ta operated), chain saw operator and demolition burning torch laborer; A and luteman), formsetter (curb, sidewalk and pavement) and strike or powderman; Add \$.25/hr for bottomman; Add \$.35/hr for line and grad DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2 involving temporary traffic control setup, for lane and shoulder closur conditions is necessary as required by the project provisions (includir such time period).	Imper operator (me Add \$.15/hr for bitu ff man; Add \$.20/hr de specialist; Add \$ New Year's Day, M 2) Add \$1.25/hr for res, when work und	chanical hand minous worker ( for blaster and 6.45/hr for pipela lemorial Day, work on projects er artificial illum	iyer. s ination	
Asbestos Abatement Worker	23.96	12.88	36.84	
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 Future Increase(s): Add \$1.60/hr on 6/1/2012; Add \$1.70/hr on 6/1/20 Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic ra Day, Independence Day, Labor Day, Thanksgiving Day & Christmas I Department of Transportation or responsible governing agency requi artificial illumination with traffic control and the work is completed after	ate on Sunday, New Day. 2) Add \$1.25/h res that work be pe	v Year's Day, Me or when the Wise erformed at night	consin	

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	15.00	1.15	16.15
Railroad Track Laborer	17.50	5.34	22.84
HEAVY EQUIPMENT OPERATORS			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower 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 Ll 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. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rai Day, Independence Day, Labor Day, Thanksgiving Day & Christmas D involving temporary traffic control setup, for lane and shoulder closure conditions is necessary as required by the project provisions (includin such time period).	or ) bs., 75/hr on 6/1/14. te on Sunday, New )ay. 2) Add \$1.25/h es, when work und	nr for work on pro er artificial illumi	ojects nation
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. of Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower 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., & Unde 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." Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rat Day, Independence Day, Labor Day, Thanksgiving Day & Christmas D involving temporary traffic control setup, for lane and shoulder closure conditions is necessary as required by the project provisions (includin such time period).	r; 75/hr on 6/1/14. te on Sunday, New Day. 2) Add \$1.25/h es, when work und	nr for work on pro er artificial illumi	ojects nation
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Scree 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 & Gutt 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, Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Gro 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 R Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle	er Tub but ;	18.90	52.12

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	\$	\$	\$
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); Wind & A- Frames. Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rai Day, Independence Day, Labor Day, Thanksgiving Day & Christmas D involving temporary traffic control setup, for lane and shoulder closure conditions is necessary as required by the project provisions (includin such time period).	.); ;hes 75/hr on 6/1/14. te on Sunday, Nev )ay. 2) Add \$1.25/h es, when work und	nr for work on pr er artificial illum	ojects ination
<ul> <li>Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed &amp; Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industria Type Tractor; Fireman (Asphalt Plant, Pile Driver &amp; Derrick NOT Perform Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Ju 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.</li> <li>Future Increase(s): Add \$2/hr on 6/1/12; Add \$2/hr on 6/1/13; Add \$1. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rational, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas D</li> </ul>	ıl ing eep the 75/hr on 6/1/14. te on Sunday, Nev Day. 2) Add \$1.25/h	nr for work on pr	ojects
involving temporary traffic control setup, for lane and shoulder closure conditions is necessary as required by the project provisions (includin			
such time period). 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 Machin Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or W 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.	ne); jell	18.90	51.57
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rai Day, Independence Day, Labor Day, Thanksgiving Day & Christmas D involving temporary traffic control setup, for lane and shoulder closure conditions is necessary as required by the project provisions (includin such time period).	te on Sunday, New Day. 2) Add \$1.25/h es, when work und g prep time prior to	nr for work on pr er artificial illum	ojects ination
Fiber Optic Cable Equipment.	00.00	6.04	28.04

2013	ACT: PROJE	SCHEDULE OF ITEMS CT(S): 3-05-75	RE' FEDERAL ID(S): N/A	TE: 11/27/12 VISED:
LINE NO	DESCRIPTION	APPROX.   QUANTITY		BID AMOUNT
SECTIO	DN 0001 ROADWAY ITEMS		DOLLARS   CTS	
0010		   9.000  STA		     .
0020	201.0205 GRUBBING   	   9.000  STA	     .	   
		   8.000  EACH	   	   
0040	203.0200 REMOVING OLD STRUCTURE (STATION) 01.		  LUMP 	   
0050	203.0200 REMOVING OLD STRUCTURE (STATION) 02.		  LUMP 	     .
0060	203.0200 REMOVING OLD STRUCTURE (STATION) 03. 113+75		  LUMP 	     .
0070	203.0200 REMOVING OLD  STRUCTURE (STATION) 04.  120+70	  LUMP 	     LUMP 	       .
0080	203.0200 REMOVING OLD STRUCTURE (STATION) 05.		    LUMP 	     .
0090	203.0200 REMOVING OLD  STRUCTURE (STATION) 06.  210+90	  LUMP 	  LUMP 	   
0100	203.0200 REMOVING OLD STRUCTURE (STATION) 07. 214+06.61		  LUMP 	   

	S	Department of Tra SCHEDULE OF ITEMS ST(S): 3-05-75	RE	GE: 2 TE: 11/27/12 VISED:
	ACTOR :		N/ A	
	ITEM DESCRIPTION	QUANTITY	UNIT PRICE     DOLLARS   CTS	
0110	203.0200 REMOVING OLD STRUCTURE (STATION) 08. 266+20	  LUMP 	  LUMP 	     .
0120	203.0200 REMOVING OLD STRUCTURE (STATION) 09. 277+80	  LUMP 	     LUMP 	     .
0130	203.0200 REMOVING OLD STRUCTURE (STATION) 10. 302+50, NORTHEAST WING		     LUMP 	     .
0140	203.0200 REMOVING OLD STRUCTURE (STATION) 11. 251+35	  LUMP 	     LUMP 	     .
0150	203.0210.S ABATEMENT OF ASBESTOS CONTAINING MATERIAL (STRUCTURE) 01. B-52-32	LUMP	     LUMP   	         .
0160	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS	   1,300.000  SY	     .	     .
	204.0150 REMOVING CURB & GUTTER	   890.000  LF	     .	     .
	204.0165 REMOVING GUARDRAIL	   7,207.000  LF		     .
	205.0100 EXCAVATION COMMON	   10,856.000  CY	     .	     .
0200	205.0200 EXCAVATION ROCK	   4,835.000  CY	     .	     .

2013	S	epartment of Tra CHEDULE OF ITEMS T(S): -05-75	RE	GE: 3 IE: 11/27/12 VISED:
	ITEM		UNIT PRICE	
	DESCRIPTION	QUANTITY		
0210	205.9015.S GRADING  SHAPING & FINISHING  INTERSECTION (LOCATION)  01. PIER SPRING ROAD	     LUMP	  LUMP   	
0220	205.9015.S GRADING  SHAPING & FINISHING  INTERSECTION (LOCATION)  02. SALUTOUS ROAD		   LUMP   	       .
0230	205.9015.S GRADING  SHAPING & FINISHING  INTERSECTION (LOCATION)  03. SPRING VALLEY ROAD	Ì	   LUMP   	       .
0240	205.9015.S GRADING  SHAPING & FINISHING  INTERSECTION (LOCATION)  04. COVERED BRIDGE ROAD	ĺ	   LUMP   	       .
0250	206.2000 EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 01. C-52-24, NORTHEAST WING	LUMP	     LUMP   	       .
0260	206.2000 EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 02. C-52-28	LUMP	   LUMP   	       .
0270	206.2000 EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 03. C-52-29	LUMP	   LUMP   	       .
0280	206.2000 EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 04.		  LUMP   	       .
	206.5000 COFFERDAMS  (STRUCTURE) 01. C-52-26 		  LUMP 	     .

	S	epartment of Tran CHEDULE OF ITEMS T(S): -05-75	RE	GE: 4 TE: 11/27/12 VISED:
CONTRA	ACTOR :			
		APPROX.		BID AMOUNT
NO	DESCRIPTION	AND UNITS	DOLLARS   CTS	DOLLARS  CTS
	206.5000 COFFERDAMS  (STRUCTURE) 02. C-52-27 	  LUMP 	  LUMP 	     .
		   370.000  SF	     .	     .
0320		   2,723.000  CY	     .	     .
	210.0100 BACKFILL  STRUCTURE 	   1,895.000  CY	     .	     .
0340	211.0100 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 01. 1643-05-75		   LUMP   	     .
0350	ROADWAY (PROJECT) 01.	   1.000  EACH		     .
	305.0110 BASE AGGREGATE  DENSE 3/4-INCH 		     .	     .
		   9,025.000  TON	     .	     .
	305.0500 SHAPING  SHOULDERS 	   770.000  STA		     .
0390	311.0115 BREAKER RUN   	   193.000  CY	     .	·
	312.0110 SELECT CRUSHED  MATERIAL 	   3,250.000  TON	     .	     .

CONTRACT: 2013010800	S	Department of Tra SCHEDULE OF ITEMS CT(S): 3-05-75	ansportation PA DA S RE FEDERAL ID(S): N/A	GE: 5 TE: 11/27/12 VISED:
CONTRACTOR :				
LINE	ITEM DESCRIPTION	APPROX.	•	BID AMOUNT
			DOLLARS   CTS	
330.01 0410  	.00 MILL AND RELAY	   140,000.000  SY		     .
335.01 0420  		   120,950.000  SY	 )    .	     .
	)10 CONCRETE CE DRAINS	   5.000  CY	       .	     
		   2,411.000  TON	       .	     .
455.06 0450  	505 TACK COAT	   7,100.000  GAL	 )    .	     .
460.11 0460 TYPE E 	03 HMA PAVEMENT 2-3	   43,715.000  TON		     .
	000 INCENTIVE TY HMA PAVEMENT	   28,110.000  DOL		   28110.00 
0480 SURFAC	20 ASPHALTIC CE DRIVEWAYS AND ENTRANCES	   270.000  TON		     .
465.03 0490 FLUMES 		   235.000  SY		     .
	100 ASPHALTIC DER RUMBLE STRIP	   85,485.000  LF	       .	       .
		   10.000  EACH	 )    .	     .

	S	epartment of Trar CHEDULE OF ITEMS T(S): -05-75	REV	GE: 6 IE: 11/27/12 VISED:
	ACTOR :			
LINE	ITEM DESCRIPTION		UNIT PRICE	
NO		AND UNITS	DOLLARS   CTS	DOLLARS  CTS
		   34.000   EACH		     
	504.0100 CONCRETE  MASONRY CULVERTS 	   362.000   CY		   
0540	505.0410 BAR STEEL  REINFORCEMENT HS  CULVERTS	   36,800.000   LB		     .
0550	505.0610 BAR STEEL  REINFORCEMENT HS COATED  CULVERTS	   2,745.000   LB		     .
0560		   17.000   EACH		     .
0570	•	   15.000   EACH		     .
		   120.000   LB		     .
	509.0301 PREPARATION  DECKS TYPE 1 	   7.000   SY		       .
	509.0302 PREPARATION  DECKS TYPE 2 	   3.000   SY		       .
0610		   352.000   SY		     .
	509.1500 CONCRETE  SURFACE REPAIR 	   24.000   SF	·	       .

201	ACT: 30108001	S	epartment of Tr. CHEDULE OF ITEM T(S): -05-75	S	DATE: 11/27/1 REVISED:	7 12
	ACTOR :					
	1	ITEM SCRIPTION	APPROX.   QUANTITY		E   BID AMOUNI 	Г 
	 		AND UNITS	DOLLARS   (	CTS   DOLLARS  C1 	rs 
			   0.60  CY	 0    .	   	
		RUBBERIZED WATERPROOFING	   75.00  SY	 0    .	     .	
	516.0600  MEMBRANE 		   352.00  SY	 0    .	   	
		CULVERT PIPE I 18-INCH	   255.00  LF	 0    .	       .	
		CULVERT PIPE I 24-INCH	   484.00  LF	 0    .		
		CULVERT PIPE I 42-INCH	   96.00  LF	 0    .	     .	
		CULVERT PIPE I 48-INCH	   146.00  LF	 0    .	     .	
		APRON ENDWALLS ERT PIPE 18-INCH		 0    .	     .	
		APRON ENDWALLS ERT PIPE 24-INCH				
	•	APRON ENDWALLS ERT PIPE 42-INCH		0    .	     	
		APRON ENDWALLS ERT PIPE 48-INCH	   2.00  EACH	 0    .	     .	

2013	S	Pepartment of Tra CCHEDULE OF ITEMS T(S): -05-75	RE	GE: 8 TE: 11/27/12 VISED:
		APPROX.	UNIT PRICE	BID AMOUNT
	DESCRIPTION	QUANTITY	•	
	520.8000 CONCRETE			
	COLLARS FOR PIPE	6.000		
		EACH	.	.
0750	521.0118 CULVERT PIPE			
	CORRUGATED STEEL 18-INCH	31.000		
		LF	-	.
	521.0124 CULVERT PIPE			
	CORRUGATED STEEL 24-INCH	34.000		
		LF	.	.
	521.0130 CULVERT PIPE			
	CORRUGATED STEEL 30-INCH	5.000		
		LF	.	.
	521.0136 CULVERT PIPE			
	CORRUGATED STEEL 36-INCH	5.000		
		LF	.	.
	521.0172 CULVERT PIPE			
	CORRUGATED STEEL 72-INCH	15.000		
		LF	.	.
0800	521.1018 APRON ENDWALLS			
	FOR CULVERT PIPE STEEL	4.000		
	18-INCH	EACH	.	.
0810		   3.000  EACH		     .
0820	521.1030 APRON ENDWALLS			
	FOR CULVERT PIPE STEEL	1.000		
	30-INCH	EACH	.	.
0830	521.1036 APRON ENDWALLS  FOR CULVERT PIPE STEEL  36-INCH	   1.000  EACH	     .	·
0840		   4.000  EACH	     .	     .

CONTRA		Department of Tra SCHEDULE OF ITEMS CT(S):	DA'	GE: 9 TE: 11/27/12 VISED:
2013	30108001 164	CT(S): 3-05-75	N/A	
CONTRA	ACTOR :			
LINE NO		APPROX.	UNIT PRICE	BID AMOUNT
NO			DOLLARS   CTS	
0850		   10.000  LF	     .	     .
0860	522.0136 CULVERT PIPE  REINFORCED CONCRETE  CLASS III 36-INCH		   	     .
0870	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	2.000	       .	       -
0880	522.1036 APRON ENDWALLS  FOR CULVERT PIPE  REINFORCED CONCRETE  36-INCH	1.000	       .	       .
0890	522.1042 APRON ENDWALLS  FOR CULVERT PIPE  REINFORCED CONCRETE  42-INCH	2.000	       .	       
0900	601.0557 CONCRETE CURB  AND GUTTER 6-INCH SLOPED  36-INCH TYPE D	1,750.000	     .	     .
0910	606.0200 RIPRAP MEDIUM   	   36.000  CY	   	     .
0920	606.0300 RIPRAP HEAVY   	   83.000  CY	   	     .
	611.0642 INLET COVERS  TYPE MS 	   3.000  EACH	     .	     .
0940	611.3901 INLETS MEDIAN 1  GRATE 	   3.000  EACH		       .

2013	S ACT: PROJEC 30108001 1643	epartment of Trar CHEDULE OF ITEMS T(S): -05-75	RE	GE: 10 TE: 11/27/12 VISED:
CONTRA	ACTOR :			
	ITEM   DESCRIPTION	APPROX.	•	BID AMOUNT
110		AND UNITS	DOLLARS   CTS	DOLLARS  CTS
0950	614.0010 BARRIER SYSTEM  GRADING SHAPING  FINISHING		     .	     .
	•	   308.750  LF	     .	     .
	614.0345 STEEL PLATE  BEAM GUARD SHORT RADIUS 	   330.250  LF	     .	     .
0980	614.0370 STEEL PLATE  BEAM GUARD ENERGY  ABSORBING TERMINAL		       .	     .
0990	614.0390 STEEL PLATE  BEAM GUARD SHORT RADIUS  TERMINAL	   7.000  EACH	       .	       .
1000		   5,137.500  LF	       .	       .
1010		   1,512.500  LF	     .	     .
	614.2500 MGS THRIE BEAM  TRANSITION 	   156.000  LF	       .	     .
	614.2610 MGS GUARDRAIL  TERMINAL EAT 	   32.000  EACH		     .
	614.2620 MGS GUARDRAIL  TERMINAL TYPE 2 	   10.000  EACH	       .	     .
1050		   1.000  EACH 	       .	       .

201	ACT: PROJE 30108001 164	Department of Trar SCHEDULE OF ITEMS CT(S): 3-05-75	DA' RE	GE: 11 TE: 11/27/12 VISED:
	ACTOR :			
LINE NO	DESCRIPTION	QUANTITY	UNIT PRICE	
1060	619.1000 MOBILIZATION	AND UNITS     1.000  EACH		DOLLARS  CTS       
1070	625.0100 TOPSOIL   	   24,000.000  SY		     .
1080	627.0200 MULCHING			
		24,000.000		
		SY	.	.
1090	628.1504 SILT FENCE			
		18,300.000		
		LF	.	
	628.1520 SILT FENCE			
	MAINTENANCE	18,300.000		
		LF		
	628.1905 MOBILIZATIONS			
	EROSION CONTROL	4.000		
		EACH	.	.
1120		   3.000  EACH		     .
	628.7020 INLET			
	PROTECTION TYPE D	6.000		
		EACH	.	.
	628.7555 CULVERT PIPE			
	CHECKS	250.000		
		EACH	.	.
1150	629.0210 FERTILIZER TYPE			
	B	1,540.000		
		CWT	.	.
	630.0120 SEEDING MIXTURE			
	NO. 20	660.000		
		LB	.	.

	Department of Tra SCHEDULE OF ITEMS ECT(S): 43-05-75	RE	GE: 12 TE: 11/27/12 VISED:
20130108001 16 CONTRACTOR :	43-05-75	N/A	
LINE   ITEM NO   DESCRIPTION	APPROX.		BID AMOUNT
	AND UNITS	DOLLARS   CTS	DOLLARS  CTS
631.1000 SOD LAWN 1170  	   138.000  SY	     .	     .
	F     32.000  EACH	     .	     .
634.0614 POSTS WOOD 1190 4X6-INCH X 14-FT 	   79.000  EACH	   	     .
	   35.000  EACH		     .
637.0202 SIGNS 1210 REFLECTIVE TYPE II 	   912.030  SF		     .
638.2101 MOVING SIGNS 1220 TYPE I 	   1.000  EACH	       .	     .
638.2602 REMOVING SIGNS 1230 TYPE II 	   108.000  EACH	       .	     
638.3000 REMOVING SMALL 1240 SIGN SUPPORTS 	   106.000  EACH	       .	     .
638.4000 MOVING SMALL 1250 SIGN SUPPORTS 	   1.000  EACH	     .	     .
642.5001 FIELD OFFICE 1260 TYPE B 	   1.000  EACH	     .	     .

		Department of Tra SCHEDULE OF ITEMS CT(S): 3-05-75	RE	GE: 13 TE: 11/27/12 VISED:
CONTRA	ACTOR :			
LINE NO	ITEM DESCRIPTION		UNIT PRICE	
			DOLLARS   CTS	
1270	643.0200 TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 01 1643-05-75	180.000	       .	     
1280		   15,500.000  DAY		     .
	643.0420 TRAFFIC CONTROL  BARRICADES TYPE III 		     .	       .
1300	643.0500 TRAFFIC CONTROL  FLEXIBLE TUBULAR MARKER  POSTS		     .	       .
1310	643.0600 TRAFFIC CONTROL  FLEXIBLE TUBULAR MARKER  BASES			       .
	643.0705 TRAFFIC CONTROL  WARNING LIGHTS TYPE A 		     .	       .
1330	643.0715 TRAFFIC CONTROL  WARNING LIGHTS TYPE C 	   8,100.000  DAY	     .	     .
	643.0900 TRAFFIC CONTROL  SIGNS 	   21,000.000  DAY	     .	     .
	645.0105 GEOTEXTILE  FABRIC TYPE C 	   571.000  SY	     .	     .
	645.0120 GEOTEXTILE  FABRIC TYPE HR 	   289.000  SY	     .	     .
		   70,625.000  LF	     .	     .

	S	epartment of Tran CHEDULE OF ITEMS T(S): -05-75	RE	GE: 14 TE: 11/27/12 VISED:
	ACTOR :			
LINE NO	ITEM DESCRIPTION	APPROX.		BID AMOUNT
			DOLLARS   CTS	
	646.0126 PAVEMENT			
	MARKING EPOXY 8-INCH	950.000		
		LF		
1390	646.0406 PAVEMENT			
	MARKING SAME DAY EPOXY	48,535.000		
	4-INCH	LF	.	
1400	647.0566 PAVEMENT			
	MARKING STOP LINE EPOXY	300.000		
	18-INCH	LF		
1410	647.0736 PAVEMENT			
	MARKING DIAGONAL EPOXY	460.000		
	18-INCH	LF	.	.
	648.0100 LOCATING			
	NO-PASSING ZONES	6.070		
		MI	.	.
	649.0100 TEMPORARY			
	PAVEMENT MARKING 4-INCH	12,565.000		
		LF	.	.
	650.4500 CONSTRUCTION			
	STAKING SUBGRADE	1,400.000		
		LF	•	.
	650.5000 CONSTRUCTION  STAKING BASE 	   1,400.000  LF	       .	       .
1460	650.5500 CONSTRUCTION			
	STAKING CURB GUTTER AND	1,750.000		
	CURB & GUTTER	LF	.	.
	650.6000 CONSTRUCTION			
	STAKING PIPE CULVERTS	31.000		
		EACH	.	.
1480	650.6500 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. C-52-166	  LUMP   	   LUMP   	     

	ACT: 1 30108001	SCHEDULE OF ITEM PROJECT(S): 1643-05-75		EVISED:
CONTRA	ACTOR :			
LINE				BID AMOUN
NO	DESCRIPTION	QUANTITY   AND UNITS	DOLLARS   CTS	
1490	650.8000 CONSTRUCTIO  STAKING RESURFACING  REFERENCE	DN     41,350.00  LF	 0    .	     .
1500	650.9910 CONSTRUCTIC  STAKING SUPPLEMENTA]  CONTROL (PROJECT) (  1643-05-75	L  LUMP	  LUMP   	         .
	650.9920 CONSTRUCTIC  STAKING SLOPE STAKES 	DN   5   1,000.00  LF	 0    .	     .
1520	690.0150 SAWING ASP!   	HALT     440.00  LF	 0    .	     .
1530	715.0502 INCENTIVE  STRENGTH CONCRETE  STRUCTURES			 0  1956. 
	SPV.0060 SPECIAL 03  WEIR PLATES 	I.     36.00  EACH	 0    .	     .
1550	SPV.0060 SPECIAL 02  MASONRY ANCHORS TYPE  3/8-INCH		 0    .	     .
1560	SPV.0060 SPECIAL 03  SAFETY GRATE SPECIA] 	3.   L   1.00  EACH	 0    .	     .
	SPV.0090 SPECIAL 01  CONCRETE CRACK SEAL1 		 0    .	     .
	   section 0001 total			
	     TOTAL BID			

## PLEASE ATTACH SCHEDULE OF ITEMS HERE