

**MECHANICAL SYSTEM UPGRADES**

**BANGOR – REGION 4  
OFFICE BUILDING**

**WIN 21444.00**

**2015**

# **MAINTENANCE & OPERATIONS**

## **STATE PROJECT**

## BIDDING INSTRUCTIONS

1. Use pen and ink to complete all paper bids.
2. As a minimum, the following are to be completed and must be received prior to the time of bid opening:
  - a. A copy of the Notice to Contractors
  - b. the completed Acknowledgement of Bid Amendments form
  - c. the completed Schedule of Items
  - d. two (2) copies of the completed and signed Contract Agreement, Offer & Award form
  - e. The completed Contractor Information Sheet
  - f. Any other certifications or Bid requirements listed in the Bid Documents as due by Bid opening
3. Include prices for all items in the Schedule of Items
4. For security and other reasons, all Bid Packages which are mailed or sent express, shall be provided in double (one envelope inside the other) envelopes. The *Inner Envelope* shall have the following information provided on it:
  - Bid Enclosed - Do Not Open
  - Title:
  - Town:
  - Date of Bid Opening:
  - Name of Contractor with mailing address and telephone number:

In Addition to the usual address information, the *Outer Envelope* should have written or typed on it:

- Double Envelope: Bid Enclosed
- Title:
- Town:
- Date of Bid Opening:
- Name of Contractor:

Hand-carried Bids may be in one envelope, and should be marked with the following information:

- Bid Enclosed: Do Not Open
- Title:
- Town:
- Name of Contractor:

5. If a paper Bid is to be hand carried, deliver directly to the Reception Desk using the “Public Entrance” which is located on the Capitol Street side of the DOT Headquarters Building in Augusta. <http://www.maine.gov/mdot/mainedotdirections.htm>. If a paper Bid is to be sent express, “FedEx First Overnight” delivery is suggested as the package is delivered directly to the DOT Headquarters Building, Mailroom, in Augusta located at 24 Child Street in Augusta. Other means, such as U.S. Postal’s Service Express Mail has proven not to be reliable. If a paper bid is to be mailed, the mailing address is Maine Department of Transportation, 16 State House Station, Augusta, ME 04333-0016.
6. If you need further information regarding Bid preparation, call the DOT Contracts Section at (207) 624-3410. For complete bidding requirements, refer to Section 102 of the Maine Department of Transportation, Standard Specification, November 2014 Edition.

# NOTICE

**The Maine Department of Transportation is attempting to improve the way Bid Amendments/Addendums are handled, and allow for an electronic downloading of bid packages from our website, while continuing to maintain an optional plan holders list.**

**Prospective bidders, subcontractors or suppliers who wish to download a copy of the bid package and receive a courtesy notification of project specific bid amendments must fill out the on-line plan holder registration form and provide an email address to the MDOT Contracts mailbox at: [MDOT.contracts@maine.gov](mailto:MDOT.contracts@maine.gov). Each bid package will require a separate request.**

**Additionally, interested parties will be responsible for reviewing and retrieving the Bid Amendments from our web site, and acknowledging receipt and incorporating those Bid Amendments in their bids using the Acknowledgement of Bid Amendment Form.**

# NOTICE

Bidders:

Please use the attached “Request for Information” form when submitting questions concerning specific Contracts that have been advertised for Bid, include additional numbered pages as required. RFI’s may be faxed to 207-624-3431, submitted electronically through the Departments web page of advertised projects by selecting the RFI tab on the project details page or via e-mail to [RFI-Contracts.MDOT@maine.gov](mailto:RFI-Contracts.MDOT@maine.gov).

These are the only allowable mechanisms for answering Project specific questions. Maine DOT will not be bound to any answers to Project specific questions received during the Bidding phase through other processes.

When submitting RFIs by Email please follow the same guidelines as stated on the “Request for Information” form and include the word “RFI” along with the Project name and Identification number in the subject line.



### **Vendor Registration**

Prospective Bidders must register as a vendor with the Department of Administrative & Financial Services if the vendor is awarded a contract. Vendors will not be able to receive payment without first being registered. Vendors/Contractors will find information and register through the following link –

<http://www.maine.gov/purchases/venbid/index.shtml>

## CONTRACTOR INFORMATION

**Contractor Name:** \_\_\_\_\_

**Mailing Address:** \_\_\_\_\_

**Vendor Customer Number:** \_\_\_\_\_

**Contact Information (Primary Contact):** \_\_\_\_\_

**Phone:** \_\_\_\_\_ **Cell Phone:** \_\_\_\_\_

**Fax:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**Mailing Address (if different from above):** \_\_\_\_\_

\_\_\_\_\_

**The company has the following organizational structure:**

**Sole Proprietorship**

**Limited Liability Company**

**Partnership**

**Joint Venture**

**Corporation**

**Other:** \_\_\_\_\_

\_\_\_\_\_

**(Date)**

\_\_\_\_\_

**(Signature)**

\_\_\_\_\_

**(Name and Title Printed)**

**STATE OF MAINE DEPARTMENT OF TRANSPORTATION  
NOTICE TO CONTRACTORS**

Sealed Bids addressed to the Maine Department of Transportation, Augusta, Maine 04333 and endorsed on the wrapper "**MaineDOT Region 4 Office Building - Mechanical Systems Upgrade in the City of Bangor**" will be received from contractors at the Reception Desk, Maine DOT Building, Capitol Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on April 1, 2015 and at that time and place publicly opened and read. Bids will be accepted from all bidders. The lowest responsive bidder must demonstrate successful completion of projects of similar size and scope to be considered for the award of this contract.

Description: WIN 21444.00

Location: Work is located at the MaineDOT Region 4 Office Building, 219 Hogan Road, Bangor

Outline of Work: Mechanical System Upgrades - Natural Gas Heating and Cooling unit and Make up Air unit.

For general information regarding Bidding and Contracting procedures, contact George Macdougall at (207) 624-3410. Our webpage at <http://www.maine.gov/mdot/contractors/> contains a copy of the Schedule of Items, Plan Holders List, written portions of bid amendments, drawings, bid results and an electronic form for RFI submittal. For Project-specific information fax all questions to Gail Iler at (207) 624-3431, use electronic RFI form or email questions to [RFI-Contracts.MDOT@maine.gov](mailto:RFI-Contracts.MDOT@maine.gov), project name and identification number should be in the subject line. Questions received after 12:00 noon of Friday prior to bid date will not be answered. Bidders shall not contact any other Departmental staff for clarification of Contract provisions, and the Department will not be responsible for any interpretations so obtained. TTY users call Maine Relay 711.

Bid Documents, specifications and bid forms are available at <http://www.maine.gov/mdot/contractors/>. They may be seen at the Maine DOT Building in Augusta, Maine and at the Department of Transportation's Regional Office in Bangor. They can be obtained at no cost at the Department at 24 Child Street, Augusta, ME, between the hours of 8:00 a.m. to 4:30 p.m., may be requested by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. or from Maine Department of Transportation, Attn.: Mailroom, 16 State House Station, Augusta, Maine 04333-0016.

**A MANDATORY pre-bid meeting** and site walk-through will be held on **TUESDAY March 24, at 11:00 am** at the Bangor Region 4 Office Building located at 219 Hogan Road, Bangor.

There will be no bid bonds, performance bonds or payment bond required.

Each Bid must be made upon blank forms provided by the Department

This Contract is subject to all applicable State Laws.

All work shall be governed by "State of Maine, Department of Transportation, Standard Specifications, November 2014 Edition", price \$10 [\$15 by mail], and Standard Details, November 2014 Edition, price \$10 [\$15 by mail]. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Standard Detail updates can be found at <http://www.maine.gov/mdot/contractors/publications/>.

The right is hereby reserved to the Maine DOT to reject any or all bids.

Augusta, Maine  
March 11, 2015

  
CLIFTON CURTIS  
ASST. HIGHWAY MAINTENANCE ENGINEER  
BUREAU OF MAINTENANCE & OPERATIONS

**SPECIAL PROVISION 102.7.3  
ACKNOWLEDGMENT OF BID AMENDMENTS**

With this form, the Bidder acknowledges its responsibility to check for all Amendments to the Bid Package. For each Project under Advertisement, Amendments are located at <http://www.maine.gov/mdot/contractors/> . It is the responsibility of the Bidder to determine if there are Amendments to the Project, to download them, to incorporate them into their Bid Package, and to reference the Amendment number and the date on the form below. The Maine DOT will not post Bid Amendments any later than noon the day before Bid opening without individually notifying all the planholders.

Amendment Number	Date

The Contractor, for itself, its successors and assigns, hereby acknowledges that it has received all of the above referenced Amendments to the Bid Package.

**CONTRACTOR**

\_\_\_\_\_ Date

\_\_\_\_\_ Signature of authorized representative

\_\_\_\_\_ (Name and Title Printed)

**SCHEDULE OF ITEMS**

Contractor \_\_\_\_\_

Item Description	Approximate Quantity and Units	Unit Price (Lump Sum)	Bid Amount (1 X Unit Price)
Item 1 - Bangor Region 4 Office Building Mechanical System Upgrades	Lump Sum	\$	\$
Total Bid for all Items			

**Bidders are required to bid all Items.**

**The Department will reject bids if any one of the following occurs:**

- a) the Bid is not Delivered to the precise location and by the precise time set forth in the Notice to Contractors or any applicable Bid Amendment,
- b) the Bid is not signed
- c) the unit price for any item is not provided or is unreadable
- d) the Bid contains any irregularities, such as: Transportation and fees must be included in the monthly rental rate and may not be separately quoted, or any handwritten changes may not be made to the contract.

**The Bidder will have no opportunity to cure the above Non-curable Bid Defects. For clarification, questions, comments/recommendations use the "Request for Information" form as directed in the Bid Book instructions.**

**CONTRACT AGREEMENT, OFFER & AWARD**

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street, Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

**(Contractor)**

a corporation or other legal entity organized under the laws of the State of \_\_\_\_\_, with its principal place of business located at \_\_\_\_\_.

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the “Contract”), hereby agree as follows:

**A. The Work.**

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, **WIN 21444.00** for the construction of **Mechanical Upgrades** in the **City of Bangor**, County of Penobscot, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

**B. Time.**

The Contractor agrees to complete all Work, except warranty work, on or before **May 29, 2015**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, November 2014 Edition and related Special Provisions.

**C. Price.**

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount, and that the amount of this offer is

\_\_\_\_\_

\$ \_\_\_\_\_

**D. Contract.**

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, November 2014 Edition, Standard Details November 2014 Edition as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

**E. Certifications.**

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

**F. Offer.**

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications November 2014 Edition, Standard Details November 2014 Edition as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of **WIN 21444.00** , **Mechanical System Upgrades** in the city of **Bangor**, State of Maine, on which bids will be received until the time specified in the “Notice to Contractors” do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached “Schedule of Items”.

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached “Schedule of Items” in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached “Schedule of Items”, which may be ordered by the Resident, and to accept as full compensation the amount determined upon a “Force Account” basis as provided in the Standard Specifications, November 2014 Edition, and as addressed in the contract documents.

Second: To begin the Work as stated in Section 107.2 of the Standard Specifications November 2014 Edition and complete the Work within the time limits given in the Special Provisions of this Contract.

Third That this offer shall remain open for 30 calendar days after the date of opening of bids.

Fourth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

\_\_\_\_\_  
Date

\_\_\_\_\_  
(Signature of Legally Authorized Representative  
of the Contractor)

\_\_\_\_\_  
Witness

\_\_\_\_\_  
(Name and Title Printed)

**G. Award.**

Your offer is hereby accepted.  
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_  
Date

By: \_\_\_\_\_

\_\_\_\_\_  
Witness

## **CONTRACT AGREEMENT, OFFER & AWARD**

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street, Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and

**(Contractor)**

a corporation or other legal entity organized under the laws of the State of \_\_\_\_\_, with its principal place of business located at \_\_\_\_\_.

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

### **A. The Work.**

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, **WIN 21444.00** for the construction of **Mechanical Upgrades** in the **City of Bangor**, County of Penobscot, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

### **B. Time.**

The Contractor agrees to complete all Work, except warranty work, on or before **May 29, 2015**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, November 2014 Edition and related Special Provisions.

**C. Price.**

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount, and that the amount of this offer is

\_\_\_\_\_

\$ \_\_\_\_\_

**D. Contract.**

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, November 2014 Edition, Standard Details November 2014 Edition as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

**E. Certifications.**

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

**F. Offer.**

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications November 2014 Edition, Standard Details November 2014 Edition as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of **WIN 21444.00** , **Mechanical System Upgrades** in the city of **Bangor**, State of Maine, on which bids will be received until the time specified in the “Notice to Contractors” do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached “Schedule of Items”.

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached “Schedule of Items” in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached “Schedule of Items”, which may be ordered by the Resident, and to accept as full compensation the amount determined upon a “Force Account” basis as provided in the Standard Specifications, November 2014 Edition, and as addressed in the contract documents.

Second: To begin the Work as stated in Section 107.2 of the Standard Specifications November 2014 Edition and complete the Work within the time limits given in the Special Provisions of this Contract.

Third That this offer shall remain open for 30 calendar days after the date of opening of bids.

Fourth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

CONTRACTOR

\_\_\_\_\_

Date

\_\_\_\_\_  
(Signature of Legally Authorized Representative  
of the Contractor)

\_\_\_\_\_

Witness

\_\_\_\_\_  
(Name and Title Printed)

**G. Award.**

Your offer is hereby accepted.  
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_

Date

By: \_\_\_\_\_

\_\_\_\_\_

Witness

**CONTRACT AGREEMENT, OFFER & AWARD**

AGREEMENT made on the date last signed below, by and between the State of Maine, acting through and by its Department of Transportation (Department), an agency of state government with its principal administrative offices located at Child Street Augusta, Maine, with a mailing address at 16 State House Station, Augusta, Maine 04333-0016, and (Name of the firm bidding the job) a corporation or other legal entity organized under the laws of the State of Maine, with its principal place of business located at (address of the firm bidding the job)

The Department and the Contractor, in consideration of the mutual promises set forth in this Agreement (the "Contract"), hereby agree as follows:

**A. The Work.**

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, PIN No. 1224.00, for the Hot Mix Asphalt Overlay in the town/city of South Nowhere, County of Washington, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

The Contractor shall be responsible for furnishing all supervision, labor, equipment, tools supplies, permanent materials and temporary materials required to perform the Work including construction quality control including inspection, testing and documentation, all required documentation at the conclusion of the project, warranting its work and performing all other work indicated in the Contract.

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same.

**B. Time.**

The Contractor agrees to complete all Work, except warranty work, on or before November 15, 2006. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, November 2014 Edition and related Special Provisions.

**C. Price.**

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts o (Place bid here in alphabetical form such as One Hundred and Two dollars and 10 cents)

\$ (repeat bid here in numerical terms, such as \$102.10)

**D. Contract.**

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, November 2014 Edition, Standard Details November 2014 Edition, Supplemental Specifications, Special Provisions, Contract Agreement, and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

**E. Certifications.**

By signing below, the Contractor hereby certifies that to the best of the Contractor's knowledge and belief:

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications November 2014 Edition (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.
2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.
3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

**F. Offer.**

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications, November 2014 Edition, Standard Details November 2014 Edition, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

**PIN 1234.00 South Nowhere, Hot Mix Asphalt Overlay**,

State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items".

The Offeror agrees to perform the work required at the price specified above and in accordance with the bids provided in the attached "Schedule of Items" in strict accordance with the terms of this solicitation, and to provide the appropriate insurance and bonds if this offer is accepted by the Government in writing.

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, November 2014 Edition, and as addressed in the contract documents.

Second: That the bid bond at 5% of the bid amount or the official bank check, cashier's check, certificate of deposit or U. S. Postal Money Order in the amount given in the "Notice to Contractors", payable to the Treasurer of the State of Maine and accompanying this bid, shall be forfeited, as liquidated damages, if in case this bid is accepted, and the undersigned shall fail to abide by the terms and conditions of the offer and fail to furnish satisfactory insurance and Contract bonds under the conditions stipulated in the Specifications within 15 days of notice of intent to award the contract.

Third: To begin the Work as stated in Section 107.2 of the Standard Specifications November 2014 Edition and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan with their bid.

Fifth: That this offer shall remain open for 30 calendar days after the date of opening of bids.

Sixth: The Bidder hereby certifies, to the best of its knowledge and belief that: the Bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of competitive bidding in connection with its bid, and its subsequent contract with the Department.

IN WITNESS WHEREOF, the Contractor, for itself, its successors and assigns, hereby execute two duplicate originals of this Agreement and thereby binds itself to all covenants, terms, and obligations contained in the Contract Documents.

\_\_\_\_\_  
Date

\_\_\_\_\_  
**(Witness Sign Here)**  
Witness

\_\_\_\_\_  
**(Sign Here)**  
(Signature of Legally Authorized Representative of the Contractor)

\_\_\_\_\_  
**(Print Name Here)**  
(Name and Title Printed)

CONTRACTOR

**G. Award.**

Your offer is hereby accepted. documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_  
Date

\_\_\_\_\_  
By: David Bernhardt, Commissioner

\_\_\_\_\_  
(Witness)

**THIS DOCUMENT MUST BE CLEARLY POSTED AT THE PERTAINING STATE FUNDED PREVAILING WAGE CONSTRUCTION SITE**

State of Maine  
 Department of Labor  
 Bureau of Labor Standards  
 Wage and Hour Division  
 Augusta, Maine 04333-0045  
 Telephone (207) 623-7906

Wage Determination - In accordance with 26 MRSA §1301 et. seq., this is a determination by the Bureau of Labor Standards, of the fair minimum wage rate to be paid laborers and workers employed on the below titled project.

Title of Project -----Maine Department of Transportation Regional Office                      Mechanical Upgrade - -21444.00

Location of Project -Bangor, Penobscot County

2015 Fair Minimum Wage Rates  
 Building 2 Penobscot County  
 (other than 1 or 2 family homes)

Occupation Title	Minimum			Occupation Title	Minimum		
	Wage	Benefit	Total		Wage	Benefit	Total
Asbestos/Lead Removal Worker	\$17.75	\$1.65	\$19.40	Ironworker - Reinforcing	\$20.00	\$1.23	\$21.23
Backhoe Loader Operator	\$18.00	\$2.23	\$20.23	Ironworker - Structural	\$22.65	\$16.17	\$38.82
Bricklayer	\$25.41	\$0.52	\$25.93	Laborers (Incl. Helpers & Tenders)	\$13.00	\$0.35	\$13.35
Bulldozer Operator	\$18.00	\$2.77	\$20.77	Laborer - Skilled	\$15.25	\$1.68	\$16.93
Carpenter	\$20.00	\$3.01	\$23.01	Loader Operator - Front-End	\$17.00	\$2.68	\$19.68
Carpenter - Acoustical	\$15.00	\$2.15	\$17.15	Mechanic- Maintenance	\$22.00	\$3.48	\$25.48
Carpenter - Rough	\$16.00	\$1.03	\$17.03	Mechanic- Refrigeration	\$22.00	\$3.90	\$25.90
Cement Mason/Finisher	\$15.50	\$0.93	\$16.43	Millwright	\$23.50	\$3.54	\$27.04
Communication Equip Installer	\$23.94	\$11.30	\$35.24	Oil/Fuel Burner Servicer & Installer (Licensed)	\$25.00	\$3.24	\$28.24
Concrete Pump Operator	\$19.00	\$3.35	\$22.35	Painter	\$15.50	\$0.00	\$15.50
Crane Operator =>15 Tons)	\$24.50	\$4.81	\$29.31	Paver Operator	\$20.00	\$2.26	\$22.26
Crusher Plant Operator	\$18.65	\$3.62	\$22.27	Pipe/Steam/Sprinkler Fitter	\$21.25	\$2.89	\$24.14
Dry-Wall Applicator	\$17.30	\$0.00	\$17.30	Plumber (Licensed)	\$22.14	\$2.99	\$25.13
Dry-Wall Taper & Finisher	\$20.13	\$3.38	\$23.51	Plumber Helper/Trainee (Licensed)	\$15.25	\$1.21	\$16.46
Earth Auger Operator	\$22.50	\$8.14	\$30.64	Propane & Natural Gas Servicer & Inst	\$24.00	\$3.10	\$27.10
Electrician - Licensed	\$23.50	\$3.75	\$27.25	Rigger	\$19.00	\$5.52	\$24.52
Electrician Helper/Cable Puller (Licensed)	\$16.39	\$3.01	\$19.40	Roller Operator - Pavement	\$18.75	\$5.25	\$24.00
Elevator Constructor/Installer	\$52.32	\$32.77	\$85.09	Roofer	\$16.00	\$1.46	\$17.46
Excavator Operator	\$18.00	\$1.99	\$19.99	Sheet Metal Worker	\$16.63	\$1.35	\$17.98
Fence Setter	\$12.75	\$0.00	\$12.75	Sider	\$16.00	\$1.73	\$17.73
Flagger	\$9.00	\$0.00	\$9.00	Stone Mason	\$14.50	\$0.29	\$14.79
Floor Layer	\$17.00	\$0.79	\$17.79	Tile Setter	\$21.00	\$4.25	\$25.25
Glazier	\$16.50	\$2.14	\$18.64	Truck Driver - Light	\$17.00	\$1.46	\$18.46
Grader/Scrapper Operator	\$20.00	\$4.90	\$24.90	Truck Driver - Medium	\$13.75	\$0.39	\$14.14
HVAC	\$22.13	\$3.99	\$26.12	Truck Driver - Heavy	\$14.00	\$1.73	\$15.73
Insulation Installer	\$19.00	\$1.97	\$20.97	Truck Driver - Tractor Trailer	\$15.92	\$2.73	\$18.65

The Laborer classifications include a wide range of work duties. Therefore, if any specific occupation to be employed on this project is not listed in this determination, call the Bureau of Labor Standards at the above number for further clarification.

Welders are classified in the trade to which the welding is incidental.

Apprentices - The minimum wage rate for registered apprentices are those set forth in the standards and policies of the Maine State Apprenticeship and Training Council for approved apprenticeship programs.

Posting of Schedule - Posting of this schedule is required in accordance with 26 MRSA §1301 et. seq., by any contractor holding a State contract for construction valued at \$50,000 or more and any subcontractors to such a contractor.

Appeal - Any person affected by the determination of these rates may appeal to the Commissioner of Labor by filing a written notice with the Commissioner stating the specific grounds of the objection within ten (10) days from the filing of these rates with the Secretary of State.

Determination No:            B2-033-2015  
 Filing Date:                 February 10, 2015  
 Expiration Date:            12-31-2015  
 BLS 424BU (R2015) (Building 2 Penobscot)

A true copy  
 Attest:   
 Pamela D. Megathlin  
 Director  
 Bureau of Labor Standards

NOTICE TO CONTRACTORS - PREFERRED EMPLOYEES

Sec. 1303. Public Works; minimum wage

In the employment of laborers in the construction of public works, including state highways, by the State or by persons contracting for the construction, preference must first be given to citizens of the State who are qualified to perform the work to which the employment relates and, if they can not be obtained in sufficient numbers, then to citizens of the United States. Every contract for public works construction must contain a provision for employing citizens of this State or the United States. The hourly wage and benefit rate paid to laborers employed in the construction of public works, including state highways, may not be less than the fair minimum rate as determined in accordance with section 1308. Any contractor who knowingly and willfully violates this section is subject to a fine of not less than \$250 per employee violation. Each day that any contractor employs a laborer at less than the wage and benefit minimum stipulated in this section constitutes a separate violation of this section. [1997, c. 757, §1 (amd).]

**SPECIAL PROVISION**  
**SECTION 102**  
**BIDDING**  
**(Mandatory Pre-Bid Meeting)**

A mandatory pre-bid meeting will be held at MaineDOT Region 4 Office Building located at 219 Hogan Road, Bangor at the time stated in the Notice to Contractors. Only Contractors that attend the meeting will be allowed to bid.

Bidders shall direct all technical or engineering questions, including requests for explanations or interpretation, in writing to the Bid Contact Person noted in the Notice to Contractors using the “Request for Information” form. Questions are to be faxed to the number listed in the Notice to Contractors or submitted to the Department at the pre-bid meeting. Bidders may attach separate sheets with questions to the “Request for Information” form.

The Department is not bound by any other oral or written representations, including information exchanged verbally at pre-Bid meetings. The Department will issue a written Bid Amendment in response to questions from Bidders when the answers: (A) relate to ambiguous, incorrect, or missing information in the Bid Documents; (B) are not apparent to Contractors experienced in the type of Work covered by the potential Contract; and (C) could have a significant impact on the cost, quality, conformity or timeliness of the Work.

SPECIAL PROVISION  
SECTION 105  
General Scope of Work  
(Limitations of Operations)

A 24 hour notice is required for any change in work schedule.

Construction The existing building will remain in use throughout the project. The building and its contents must be kept dry at all times. The exit will be open at all times for the employees, general public and vendors to enter the building. The contractor will be responsible for signing and coning the area around the entry ways to inform and protect the above mentioned people from Hazards associated with the project.

The contractor will need to work with the Contract Administrator for this facility to make arrangements for the storage of the Construction materials and equipment.

Allowable Work Times The Contractor must notify the Department a minimum of 48 hours prior to working on this project. The Contractor is solely responsible for the planning and execution of Work in order to complete the Work within the Contract Time. The Contractor shall perform work only during the following times Monday through Friday, 7 am to 5 pm, unless prior arrangements are made with the Contract Administrator, except for they may not work on Weekends and Maine State Government Holidays as provided for under the State of Maine Civil Service Rules.

**SPECIAL PROVISION**  
**SECTION 107**  
**Time**  
**(Contract Time)**

The contractor will be allowed to commence work anytime provided that all required plans/submittals have been received and approved by the Department.

The specified Contract Completion Date is May 29, 2015.

Completion of Physical Work occurs when the Work is complete and has undergone a successful final inspection. Liquidated Damages will cease upon the physical completion of the Work. The Contractor shall deliver the Materials Certification, as applicable, to the Department within 30 Days of the date of the notification that the Physical Work is Complete. Within 75 Days of the receipt of these documents, the Department will advise the Contractor in writing of the Final Quantities and any damages to be assessed for the Project. The Contractor shall resolve any Project issues that remain and provide the All Bills Paid and Request for Final Payment Letters to the Department within 30 Days. Completion occurs when the Contractor has finished all Work pursuant to the Contract, including Delivery and acceptance of all Documentation. Completion does not mean substantial Completion. The Department will make Final Payment, including the release of all remaining retainage following Completion, when the Work is complete and has undergone a successful final inspection and all documentation is complete.

SPECIAL PROVISION SECTION 108  
(Invoices and Payment)

The Contractor shall submit an itemized invoice to the Department for services monthly and at the completion of the Work or as otherwise noted in the Contract documents for approval and payment.

At a minimum, invoices shall include the following information:

Contractor name, address & Contract Number  
Invoice Date & Number  
Dates of Service  
Description and Location of Service  
Quantities at the Prices contained in the Contractor's Bid  
Percent complete of each Item priced at the Unit cost for each Item at the Unit  
Prices contained in the Contractor's Bid  
Extra Work agreed to by written Contract Modification  
Total amount due

The Department will make payments based upon approved complete and correct invoices for accepted Work invoiced at bid prices. No such payment will be made if, in the judgment of the Department, the Work is not in accordance with the provisions of the Contract.

Payments to the Contractor shall be full compensation for furnishing all labor, equipment, materials, services, and incidentals used to perform all Work under the Contract in a complete and acceptable manner, and for all risk, loss, damage, or expense of any kind arising from the nature or execution of the Work. The Contractor shall pay all taxes, charges, fees, and allowances. Except as expressly provided otherwise in this Contract, all such taxes, charges, fees, and allowances are incidental to the Contract. Most items are exempt from Maine sales tax. The Contractor shall Bid in accordance with the Maine statutory exemption from sales tax. No payments due the Contractor will be adjusted for inflation. No interest shall be due and payable on any payment due the Contractor. The Department may require that the Contractor submit backup documentation including copies of receipts, invoices, and itemized payments to Subcontractors.

The Department may withhold payments claimed by the Contractor on account of:

- A. Incomplete, Inaccurate or Incorrect Invoices,
- B. Defective Work or non-conforming Work,

- C. Damages for Non-conforming, Defective or Unauthorized Work or Equipment,
- D. Damage to a third party,
- E. Claims filed or reasonable evidence indicating probable filing of claims,
- F. Failure of the Contractor to make payments to Subcontractors or for Materials or labor,
- G. Regulatory non-compliance or enforcement,
- H. Failure to submit Documentation
- I. Failure to provide the Department the opportunity to inspect the Work
- J. Substantial evidence that the Project cannot be completed for the unpaid balance,
- K. Substantial evidence that the amount due the Department will exceed the unpaid balance,
- L. All other causes that the Department reasonably determines negatively affect the State's interest.

The Acceptance by the Contractor of the final payment, as evidenced by cashing of the final payment check, constitutes a release to the Department from all claims and liability under the Contract. Upon Final Acceptance, the Contractor is released from further obligation, except for warranty obligations provided for in this Contract.

**SPECIAL PROVISION**  
**SECTION 656**  
Temporary Soil Erosion and Water Pollution Control

Standard Specification 656 of the Standard Specifications is deleted and replaced by this Special Provision.

The following information and requirements will constitute the Soil Erosion and Water Pollution Control Plan for this Project. The soil erosion and water pollution control measures associated with this work are as follows:

All work shall be done in accordance with the latest revision of the Maine Department of Transportation Best Management Practices for Erosion and Sediment Control (a.k.a. Best Management Practices manual or BMP Manual). The latest version is dated February 2008 and is available at:

<http://www.maine.gov/mdot/environmental-office-homepage/surface-water-resources.php>

**Procedures specified shall be according to the BMP Manual unless stated otherwise.**

1. The on-site person responsible for implementation of this plan, shall be the Contractor's Superintendent or other supervisory employee (the "Environmental Coordinator") with the authority to immediately remedy any deficient controls and shall provide the Resident with their numbers (telephone number, cellular phone and pager numbers, if applicable) where the Environmental Coordinator can be reached 24 hours a day.
2. All areas where soil is disturbed shall be permanently mulched on a daily basis and seeded on a weekly basis (if seeded by hand, it shall be done on a daily basis). All previously mulched areas shall be maintained and re-mulched on a daily basis if bare areas develop until an acceptable growth of grass has been obtained.
3. All disturbed ditches shall receive erosion control blanket or stone rip rap, as required, prior to leaving the site each day.
4. Winter stabilization BMPs shall be applied in accordance with the MDOT BMP Manual between November 1 and April 15 or during frozen ground conditions.
5. If the Work includes the handling or storage of petroleum products or Hazardous Materials including the on site fueling of Equipment, the Resident must be provided with a Spill Prevention Control and Countermeasure Plan (SPCCP) plan. At a minimum, the SPCCP shall include:
  - . The name and emergency response numbers (telephone number, cellular phone and pager numbers, if applicable) of the Contractor's representative responsible for spill prevention;
  - . General description and location of (1) handling, transfer, storage, and containment facilities of such products or Materials ("activities and facilities") and (2) potential

**SPECIAL PROVISION  
SECTION 656**

**Temporary Soil Erosion and Water Pollution Control**

- receptors of such products or Materials including oceans, lakes, ponds, rivers, streams, wetlands, and sand and gravel aquifers ("sensitive resources") including the distances between said activities and facilities and said sensitive resources;
- . Description of preventative measures to be used to minimize the possibility of a spill including Equipment and/or Materials to be used to prevent discharges including absorbent Materials,
  - . A contingency response plan to be implemented if a spill should occur including a list of emergency phone/pager numbers including the Contractor's representative, MDEP Spill Response, the Resident, and local police and fire authorities. For a related provision, see *Standard Specification, Section, 105.2.2 - Project Specific Emergency Planning*.
6. The Environmental Coordinator must inspect and maintain daily all controls for the duration of the project.
  7. If the Project Resident directs new soil disturbance that requires temporary erosion and sedimentation control, all permits shall be obtained by the MaineDOT and a full SEWPCP will be required and paid for as Extra Work.

Any costs related to this plan shall be considered incidental to the contract.

**SPECIAL PROVISION**  
**SECTION 815**  
**Buildings**

Description The work shall consist of the replacement of the heating system in the Maine Department of Transportation Region 4 Office building located at 219 Hogan Road Bangor, Maine in accordance with these contract documents.

The work as defined in this contract, specifications and contract documents for the Maine Department of Transportation Region 4 Office Building – Mechanical System Upgrades including removing and replacement of existing roof top heating and cooling unit(s), installation of a make-up air hood and piping, local controls, associated electrical roof curbs and related incidentals.

Materials All materials shall be new and unused.

Variations from Materials Specified Whenever and wherever items have been identified by describing a proprietary product, such identification is intended to be descriptive, but not restrictive, and is used to indicate the quality and characteristics of products that are satisfactory. Bids shall be considered as offering the item specified in the Invitation for Bid. The Department will consider all alternates submitted by the Contractor, but is not bound to accept any which, in its opinion, is not in the Department's best interest and are determined by the Department to be of equal value in all material respects to the proprietary items specified. The evaluation of and determination as to equality of the product offered shall be the responsibility of the Department and will be based on information furnished by the Contractor, as well as information reasonably available to the purchasing activity.

Quality and Standards Materials and manufactured products incorporated into the work shall be new unless otherwise specified, free from defect, and in conformity with the contract. When material is fabricated or treated with another material or where any combination of materials is assembled to form a finished product, any or all of which are covered by specifications, the Department may reject the finished product if any of the components do not comply with the specifications. The Department may reject materials not conforming to the Specifications at any time, and the Contractor shall remove them immediately from the project site unless otherwise instructed by the Department. The Contractor shall not store or use rejected materials on any Department project.

If there is no applicable standard set forth in this contract for particular Work, then the Contractor shall perform that Work in accordance with industry standards prevailing at

February, 2015

the time of bid. If the Department determines that Work is non-conforming, the Contractor shall remove, replace, or otherwise correct all unacceptable work as directed by the Department at the expense of the Contractor, without cost or liability to the Department.

Submittals The Contractor shall submit manufacturers' specifications, product data and installation instructions for all items furnished. The Contractor shall not be relieved of responsibility for any deviation from the requirements of the specifications unless the contractor has specifically informed the owner in writing of such deviation at the time of submission and the owner has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions. No portion of the work shall be commenced until the Department has approved the submittal.

The Contractor shall submit an electronic pdf file or two (2) copies of submittals and shop drawings to Department for review at least fifteen (15) days prior to incorporation into the work. Shop drawings shall be approved prior to incorporation into the work.

#### Delivery, Storage, and Handling

- Store materials off the ground and protected from the weather.
- Deliver products in manufacturers' original containers, dry, undamaged, with seals and labels intact.

#### Installation

- Installation, handling and storage of all materials shall comply with manufacturer's instructions and recommendations.
- The Contractor shall provide the Department with safe access to all portions of the Work in Conformity with all applicable OSHA requirements. The Contractor shall furnish the Department with all information and assistance required to make a detailed inspection.
- Completed installation shall conform, to all applicable National, State and local and governmental agencies having jurisdiction requirements, standards and codes.
- Installation, handling and storage of all materials shall comply with manufacturer's instructions and recommendations.
- The Contractor shall notify the Department of the presence of any deteriorated or damaged components of the existing structure to remain.
- Protect finished work until final acceptance.

If the Department determines that non-conforming work substantially conforms to the Contract, the Department may accept the non-conforming work, provided that the Department may require a credit to the Department to be deducted from amounts otherwise due the Contractor. If the Department and Contractor cannot agree to the amount of the credit, the work shall be unacceptable work. The Contractor shall remove, replace, or otherwise correct all unacceptable work as directed by the Department at the expense of the Contractor, without cost or liability to the Department.

Responsibility for Existing Structure Removal of existing materials shall be accomplished without damage to the portion of the structure that is to remain. The contractor shall be responsible for all damage to the existing structure resulting from an act, omission, neglect, or misconduct of the Contractor until Final Acceptance. The Contractor shall, at its sole expense, rebuild, repair, restore, or replace such damage property of otherwise make any good losses that arise from such damage.

Responsibility for Damage to Work Expect for damage to Project caused by Uncontrollable Events, the Contractor shall bear all risk of loss relating to the Work until Final Acceptance, regardless of cause, including completed Work, temporary Structures and all other items or Material not yet incorporated into the work.

Contractor's Safety Program If a copy of the Contractor's Safety Plan is not on file with the Department, the Contractor must submit an acceptable Contractor's Safety Plan to the Department's Bureau of Maintenance & Operations Section prior to Contract award. If copy of the Contractor's Safety Plan is on file with the Department's Bureau of Maintenance & Operation's, the Contractor must confirm, in writing, that the plan on file is still applicable prior to Contract award. The Contractor shall designate which portions such submissions it considers confidential business information. If such program is revised during the Contract Time, the Contractor shall provide the updated program to the Department. The Contractor shall comply with its safety program and the Standard Specifications. The Contractor shall be responsible for all claims or damages arising from failure to so comply and indemnifies and holds harmless the Department from all claims and damages arising from such non-compliance.

The contractor shall be responsible for the safety of all operations in connection with the Contract and shall take all necessary actions to ensure the safety of all persons who may be in, on or adjacent to the Site. The Contractor shall perform Work in a manner that is in compliance with the Contractor's Plan, an applicable OSHA requirements, and established safety practices.

Failure by the Contractor to comply with the Contractor's Plan or an applicable OSHA requirement or to follow all established safety practices pertaining to the work being performed, will result in the immediate suspension of Work on the entire project until all unsafe practices are corrected and comply with the applicable requirements, standard or practice.

The Contractor shall provide the Department with safe access to all portions of the Work in Conformity with all applicable OSHA requirements. The Contractor shall furnish the Department with all information and assistance required to make a detailed inspection.

#### Environmental Requirements and Waste Materials

All waste materials shall be removed and disposed of in accordance with all federal, state, and local laws.

All materials removed from the site shall be the property of the contractor. Sale of these materials on site, and removal by persons other than the contractor or his personnel, shall be at the risk of the contractor. Once the contract is signed, responsibility for the safety of the public within the confines of the project shall be the responsibility of the contractor. The contractor shall be responsible for any and all materials dropped from his trucks distant from the project. The contractor shall make his own arrangement for disposal of materials taken from the site, and there will be no burning of materials on or adjacent to the site.

Hazardous Materials If the Contractor encounters any condition that indicates the presence of uncontrolled petroleum or hazardous Materials, the Contractor shall immediately stop Work, notify the Department, treat any such conditions with extreme caution, and secure the area of potential hazard to minimize health risks to Workers and the public, and to prevent additional releases of contaminants into the environment. Such conditions include the presence of barrels, tanks, unexpected odors, discoloration of soil or water, an oily sheen on soil or water, excessively hot earth, smoke, or any other condition indicating uncontrolled petroleum or hazardous Materials. The Contractor shall continue Work in other areas of the Project unless otherwise directed by the Department. The Contractor shall comply with all federal, State, and local laws concerning the handling, storage, treatment, and disposal of uncontrolled petroleum or hazardous Material.

Permits, Fees, and Notices The Contractor shall also acquire, at its sole expense, all licenses, Permits and other permissions that are necessary, appropriate and legally required to perform the Work. The contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and lawful orders of any public authority bearing on the performance of the work. If the contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Department, he shall assume full responsibility therefore and shall bear all cost attributable thereto.

Final Cleaning The Contractor shall clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program and comply with manufacturer's written instructions.

1. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
2. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
3. Remove tools, construction equipment, machinery, and surplus material from Project site.

February, 2015

4. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
5. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
6. Sweep concrete floors broom clean in unoccupied spaces.
7. Remove labels that are not permanent.
8. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
9. Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
10. Wipe surfaces of mechanical and electrical equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
11. Replace parts subject to unusual operating conditions.

Closeout Documentation The following documents shall be added to the required list of closeout documentation:

Project Record Drawings  
Warranties  
Maintenance & Operations Manual

The Contractor shall prepare and submit Project Record Documents, operation and maintenance manuals, and similar final record information. The Contractor shall prepare operation and maintenance manuals, including the following:

Emergency data.  
Operation data for systems, subsystems, and equipment.  
Maintenance data for the care and maintenance of systems and equipment.

Warranty The Contractor shall guarantee work for one (1) year from date of Final Acceptance by the Department. The Physical Work must be Complete and in Conformity with the Contract and the Closeout Documentation, exclusive of the All Bills Paid and Request for Final Payment Letters, in order for the Department to finally "accept" the Project. All defects, including leaks occurring during guarantee period, shall be corrected without cost to the Owner. The contractor unconditionally warrants and guarantees to the owner that all work will be of good quality, free from faults and defects, and in conformance with the specification. All work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by the owner, the contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If the Department discovers any

February, 2015

warranty defects during the warranty period, the Contractor agrees to perform all remedial work, at no additional cost or liability to the Department. Remedial Work will be completed within two weeks unless a more immediate response is required for safety or convenience, as determined by the Department.

The Contractor shall provide Manufacturer's standard written pro-rated warranty on heating and cooling units. The Contractor hereby assigns to the Department the right to enforce all manufacturer's warranties or guarantees on all materials, equipment or products purchased for the work that exceed the nature or duration of the warranty obligations assumed by the Contractor under this Contract.

The Contractor agrees that the warranty obligations provided by this Contract shall be reported as an outstanding obligation in the event of bankruptcy, dissolution, or the sale, merger, or cessation of operations of the Contractor.

Method of Measurement The MaineDOT Region 4 Office Building – Mechanical System Upgrade will be measured for payment as one lump sum, complete in place and accepted.

Basis of Payment The MaineDOT Region 4 Office Building – Mechanical System Upgrade will be paid for at the contract lump sum price, complete and accepted which shall be full compensation for the work indicated on the plans and as called for in the contract, Upgrades including removing and replacement of existing roof top heating and cooling unit(s), installation of a make-up air hood and piping, local controls associated electrical roof curbs and related incidentals necessary to complete the work.

Payment will be made under:

	<u>Pay Item</u>	<u>Pay Unit</u>
815.00	MaineDOT Region 4 Office Building – Mechanical System Upgrade	Lump Sum

**SPECIAL PROVISION**  
**SECTION 000102**  
**PROJECT INFORMATION**

**PART 1 GENERAL**

**1.1 PROJECT IDENTIFICATION**

- A. Project Name: MaineDOT – Bangor Region 4 Office Building – Mechanical System Upgrade.
- B. The Department hereinafter referred to as Department: Maine Department of Transportation (“MaineDOT”).

**1.2 NOTICE TO PROSPECTIVE BIDDERS**

- A. These documents constitute an invitation to prospective Bidders to submit proposals for the work as described in the Project Description (below).

**1.3 PROJECT DESCRIPTION**

- A. Summary Project Description: Provide Labor and Materials for upgrades to the existing heating, cooling, building controls and air control systems.
- B. Contract Scope:
  - 1. Provide Labor and Materials for the replacement of the existing rooftop heating and cooling unit with a York ZF Sunline R410A 13 SEER, 3-6 ton capacity and associated pumps, roof top curb (14” min), circulators, piping, electrical components and controls.
  - 2. Provide Labor and Materials for the removal of the existing make up air unit and installation of a new replacement make-up air unit, a CaptiveAire A1-D with a 10” Blower with a 2000 CFM capacity with a heater that supplies 183,000 BTU’s that is operated with direct fire natural gas, electrical components and controls, or an approved equal, as determined by the Department.
  - 3. Install new building thermostats to control heating and cooling pursuant to sequence of operations. Intent is to ensure heating and cooling systems are not operating at the same time for extended periods resulting in unnecessary energy consumption.

**1.4 PROJECT ADMINISTRATOR**

- A. Department's Representative:
  - 1. Contact: Eric Willet
  - 2. Address: 219 Hogan Road.
  - 3. City, State, Zip: Bangor, ME 04401.
  - 4. Office Phone: (207) 941-4500.

**PART 2 PART 2 PRODUCTS (NOT USED)**

**PART 3 PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

**SPECIAL PROVISION**  
**SECTION 013000**  
**ADMINISTRATIVE REQUIREMENTS**

PART 1

PART 2 GENERAL

2.3 SECTION INCLUDES

- A. Preconstruction meeting.
- B. Submittals for review and information, and project closeout
- C. Submittal procedures.

2.4 RELATED REQUIREMENTS

- A. Section 017000 - Execution and Closeout Requirements: Additional coordination requirements.

2.5 PROJECT COORDINATION

- A. Project Administrator: Department's Representative.
- B. During construction, coordinate use of site and facilities through the Project Administrator.
- C. Comply with Project Administrator's procedures for intra-project communications; submittals, reports and records, schedules, and resolution of ambiguities and conflicts.
- D. Comply with instructions of the Project Administrator for use of temporary utilities and construction facilities.
- E. Coordinate field engineering and layout work with the Project Administrator.
- F. Make the following types of submittals to the Project Administrator:
  - 1. Requests for interpretation.
  - 2. Shop drawings, product data, and samples.
  - 3. Test and inspection reports.
  - 4. Design data.
  - 5. Manufacturer's instructions and field reports.

2.6 Department Occupancy

- A. The building will be operating during the work associated with this contract. Hours of work are to be performed between the hours of 7:00 am and 5:00 pm EST Monday through Friday. Extended work hours, work on weekends or holidays must be Authorized and approved by the Department or the Project Administrator.
- B. During construction, coordinate use of site and facilities through the Project Administrator

**PART 3 PRODUCTS – NOT USED**

**PART 4 EXECUTION**

**4.1 PRECONSTRUCTION MEETING**

- A. Attendance Required:
  - 1. Department.
  - 2. Department's Representative.
  - 3. General Contractor.
  - 4. Sub-Contractor(s) (optional)
  
- B. Agenda:
  - 1. Distribution of Contract Documents.
  - 2. Submission of list of Subcontractors, list of Products, and progress schedule.
  - 3. Procedures and processing of field decisions, submittals, substitutions, submittal of invoice(s) for payment, proposal request, Contract Modifications, and Contract closeout procedures.
  - 4. Project Scheduling.

**4.2 SUBMITTALS FOR REVIEW**

- A. When the following are specified in individual sections, submit them for review:
  - 1. Product data.
  
- B. Submit to the Department's Representative for review for the limited purpose of checking for conformance with information given and the design intent expressed in the contract documents.

**4.3 SUBMITTALS FOR INFORMATION**

- A. When the following are specified in individual sections, submit them for information:
  - 1. Design data.
  - 2. Certificates.
  - 3. Test reports.
  - 4. Inspection reports.
  - 5. Manufacturer's instructions.
  - 6. Manufacturer's field reports.
  - 7. Other types indicated.

**4.4 SUBMITTALS FOR PROJECT CLOSEOUT**

- A. When the following are specified in individual sections, submit them at project closeout:
  - 1. Project record documents.
  - 2. Operation and maintenance data.
  - 3. Warranties.
  - 4. Other types as indicated.
  
- B. Submit for Department's benefit during and after project completion.

**4.5 NUMBER OF COPIES OF SUBMITTALS**

- A. Documents for Information: Submit electronically.

**4.6 SUBMITTAL PROCEDURES**

- A. Transmit each submittal with a cover sheet.
  
- B. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.

- C. Identify Project, General Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- D. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- E. Deliver submittals to Department's Representative at business address during open business hours.
- F. Schedule submittals to expedite the Project, and coordinate submission of related items.
- G. For each submittal for review, allow 7 days excluding delivery time to and from the General Contractor.
- H. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- I. Provide space for review stamps and or Department signature.
- J. When revised for resubmission, identify all changes made since previous submission.
- K. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- L. Submittals not requested will not be recognized or processed.

**END OF SECTION**

## **SECTION 016000 PRODUCT REQUIREMENTS**

### **PART 5 GENERAL**

#### **5.1 SECTION INCLUDES**

- A. Transportation, handling, storage and protection.

#### **5.2 SUBMITTALS**

- A. Proposed Products List: Submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
- B. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- C. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

### **PART 2 PRODUCTS**

#### **2.1 NEW PRODUCTS**

- D. Provide new products unless specifically required or permitted by the Contract Documents.

### **PART 3 EXECUTION**

#### **3.1 TRANSPORTATION AND HANDLING**

- E. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- F. Transport and handle products in accordance with manufacturer's instructions.
- G. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- H. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- I. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- J. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

#### **3.2 STORAGE AND PROTECTION**

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions

- C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- D. For exterior storage of fabricated products, place on sloped supports above ground.
- E. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- F. Prevent contact with material that may cause corrosion, discoloration, or staining.
- G. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

**END OF SECTION**

SPECIAL PROVISION  
SECTION 017000  
EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, including selective demolition, except removal, disposal, and/or remediation of hazardous materials and toxic substances.
- C. Cutting and patching.
- D. Laying out the work.
- E. Cleaning and protection.
- F. Starting of systems and equipment.
- G. Demonstration and instruction of Department personnel.
- H. Closeout procedures, except payment procedures.
- I. General requirements for maintenance service.

1.2 PROJECT CONDITIONS

- A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

1.3 COORDINATION

- A. Coordinate scheduling, submittals, and work of the various sections of the Special Provisions to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Notify affected utility companies and comply with their requirements.
- C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- D. Coordinate completion and clean-up of work of separate sections.

## PART 2 PRODUCTS (NOT USED)

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify that existing site conditions are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- C. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- D. Prior to demolition or removal of existing equipment: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

### 3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.

### 3.3 LAYING OUT THE WORK

- A. Verify locations of existing products prior to starting work.
- B. Protect survey control points prior to starting site work; preserve permanent reference points during construction (when applicable).
- C. Utilize recognized engineering survey practices.
- D. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
  - 1. Building foundation, column locations, and ground floor elevations (when applicable).
- E. Periodically verify layouts by same means (when applicable).
- F. Maintain a complete and accurate log of control and survey work as it progresses (when applicable).

### 3.4 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.

### 3.5 ALTERATIONS

- A. Adapt existing work to fit new work: Make as neat and smooth transition as possible.

- B. Patching: Where the existing surface is not indicated to be refinished, patch to match the surface finish that existed prior to cutting. Where the surface is indicated to be refinished, patch so that the substrate is ready for the new finish.
- C. Clean existing systems and equipment.
- D. Comply with all other applicable requirements of this section.

### 3.6 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. See Alterations article above for additional requirements.
- C. Perform whatever cutting and patching is necessary to:
  - 1. Complete the work.
  - 2. Fit products together to integrate with other work.
  - 3. Provide openings for penetration of mechanical, electrical, and other services.
  - 4. Match work that has been cut to adjacent work.
  - 5. Repair areas adjacent to cuts to required condition.
  - 6. Repair new work damaged by subsequent work.
  - 7. Remove samples of installed work for testing when requested.
  - 8. Remove and replace defective and non-conforming work.
- D. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- E. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- F. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- G. Restore work with new products in accordance with requirements of Contract Documents.
- H. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material, to full thickness of the penetrated element.
- J. Patching:
  - 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
  - 2. Match color, texture, and appearance.
  - 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

### 3.7 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.

- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

### 3.8 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

### 3.9 SYSTEM STARTUP

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- C. Verify that wiring and support components for equipment are complete and tested.
- D. Execute start-up under supervision of applicable Contractor personnel, Department's Representative and manufacturer's representative in accordance with manufacturers' instructions.
- E. Submit a written report that equipment or system has been properly installed and is functioning correctly.

### 3.10 DEMONSTRATION AND INSTRUCTION

- A. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled time, at equipment location.
- B. Provide a qualified person who is knowledgeable about the Project to perform demonstration and instruction of Department personnel.
- C. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Department's personnel in detail to explain all aspects of operation and maintenance.
- D. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.
- E. All Spare and extra parts are to become the property of the Department, MaineDOT.

3.11 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

3.12 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
  - 1. Provide copies to Department and The Department's Representative.
- B. Notify Department's Representative when work is considered complete.
- C. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for the Department's Representative review.
- D. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Department's acceptance.
- E. Correct any items of work that was determined not be complete pursuant to the Contract as a result of any inspection completed by the Department or Departments representative.
- F. Notify Department's Representative when work is considered finally complete.
- G. Complete items of work determined by Department's Representative's final inspection.
- H. Provide As-Built drawings of installed work.
- I. Provide Department with Operation and Maintenance Manuals.
- J. Provide Department Warranty documentation.

3.12 MAINTENANCE

- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, until the Completion of work or Completion of contract.
- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Department.

**END OF SECTION**

**SPECIAL PROVISION**  
**SECTION 220700**  
**MECHANICAL INSULATION**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section includes ductwork insulation, equipment insulation, covering, breeching insulation and thermal insulation for piping systems including vapor retarders, jackets and accessories.

**1.2 REFERENCES**

- A. ASTM C610 - Standard Specification for Expanded Perlite Block and Pipe Thermal Insulation.
- B. ASTM C612 - Standard Specification for Mineral Fiber Block and Board Thermal Insulation.
- C. ASTM C795 - Standard Specification for Thermal Insulation for Use in Contact with Austenitic Stainless Steel.
- D. ASTM C1071 - Standard Specification for Thermal and Acoustical Insulation (Glass Fiber, Duct Lining Material).
- E. ASTM C1126- Standard Specification for Preformed Closed Cell Phenolic Foam Pipe and Board Insulation.
- F. ASTM C1136 – Standard Specification for Flexible, Low Permeance Vapor Retarders for Thermal Insulation.
- G. ASTM D1784 - Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.
- H. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- I. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.
- J. ASTM E162 - Standard Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source.
- K. NAIMA (North American Insulation Manufacturers Association) - National Insulation Standards.
- L. SMACNA (Sheet Metal and Air Conditioning Contractors' National Association) - HVAC Duct Construction Standards - Metal and Flexible.

**1.3 SUBMITTALS**

- A. Section 013000 - Submittal Procedures: Submittal procedures.

- B. Product Data: Provide product description, thermal characteristics and list of materials and thickness for each service, and locations.
- C. Manufacturer's Installation Instructions: Indicate installation procedures that ensure acceptable workmanship and installation standards will be achieved.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

#### 1.4 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience.
- B. Applicator: Company specializing in performing Work of this section with minimum three years documented experience.

#### 1.5 PRE-INSTALLATION MEETING

- A. Convene minimum one week before commencing work of this section.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 - Product Requirements: Transportation and Handling and Storage and Protection.
- B. Accept materials on site in original factory packaging, labeled with manufacturer's identification, including product density and thickness.
- C. Protect insulation from weather and construction traffic, dirt, water, chemical, and mechanical damage, by storing in original wrapping.

#### 1.7 ENVIRONMENTAL REQUIREMENTS

- A. Section 016000 - Execution
- B. Do not install insulation outside ambient conditions required by manufacturer of each product.

#### 1.8 FIELD MEASUREMENTS

- A. Verify field measurements before fabrication.

#### 1.9 WARRANTY

- A. Section 017000 - Execution Requirements: Closeout procedures

### PART 2 PRODUCTS

#### 2.1 MINERAL FIBER, RIGID

- A. Manufacturers:
  - 1. Knauff.
  - 2. Schuller.
  - 3. Substitutions: Section 016000 - Product Requirements.
- B. Insulation: ASTM C612 Mineral Fiber Block and Board Insulation, Type IA

- C. Vapor Retarder Jacket:
  - 1. Kraft paper with glass fiber yarn and bonded to aluminized film.
  - 2. Moisture vapor transmission: ASTM E96; 0.04 perm.
  - 3. Secure with two coats of vapor barrier mastic and glass tape.
- D. Vapor Retarder Tape.
  - 1. Kraft paper reinforced with glass fiber yarn and bonded to aluminized film, with pressure sensitive rubber based adhesive.
- E. Indoor Vapor Retarder Finish:
  - 1. Cloth: Untreated: 9 oz/sq yd weight, glass fabric.
  - 2. Vinyl emulsion type acrylic, compatible with insulation, white color.

## 2.2 GLASS FIBER, RIGID

- 1. Substitutions: Section 016000 - Product Requirements.
- B. Insulation: ASTM C612 or ASTM C592; rigid, noncombustible.
  - 1. 'K' factor: ASTM C177 or ASTM C518, 0.24 at 75 degrees F.
  - 2. Maximum Service Temperature: 450 degrees F.
  - 3. Maximum Moisture Absorption: 0.1 percent by volume.
  - 4. Density: 2.0 lb/cu ft.
- C. Vapor Retarder Jacket: ASTM C1136 Flexible, Low Permeance Vapor Retarders for Thermal Insulation, Type II.
- D. Facing: 1 inch galvanized steel hexagonal wire mesh stitched on one face of insulation with expanded metal lath on other.
- E. Vapor Retarder Lap Adhesive:
  - 1. Compatible with insulation.
- F. Insulating Cement/Mastic:
  - 1. ASTM C195; hydraulic setting on mineral wool.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify that piping, equipment and ductwork has been tested before applying insulation materials.
- B. Verify that surfaces are clean and dry, with foreign material removed.

### 3.2 INSTALLATION

- A. Install in accordance with NAIMA National Insulation Standards.
- B. Locate insulation and cover seams in least visible locations.
- C. Insulate entire system including fittings, unions, flanges, flexible connections, and expansion joints.

- D. Continue insulation through penetrations of building assemblies or portions of assemblies having a fire resistance rating of one hour or less. Provide intumescent firestopping when continuing insulation through assembly. Finish at supports, protrusions, and interruptions.
- E. Pipe Exposed in Mechanical Equipment Rooms or Finished Spaces: Finish with PVC jacket and fitting covers.
- F. Factory Insulated Equipment: Do not insulate.
- G. Exposed Equipment: Locate insulation and cover seams in least visible locations.
- H. Apply insulation close to equipment by grooving, scoring, and beveling insulation. Fasten insulation to equipment with studs, pins, clips, adhesive, wires, or bands.
- I. Fill joints, cracks, seams, and depressions with bedding compound to form smooth surface. On cold equipment, use vapor retarder cement.
- J. Insulated equipment that contains fluids below ambient temperature: Insulate entire system.
- K. Nameplates and ASME Stamps: Bevel and seal insulation around; do not insulate over.
- L. Equipment Requiring Access for Maintenance, Repair, or Cleaning: Install insulation so it can be easily removed and replaced without damage.

### 3.3 SCHEDULES

- A. Heating Systems:
  - 1. Heating Supply and Return:
    - a. Glass Fiber Rigid:
      - 1) Pipe Size Range: All sizes.
      - 2) Thickness: 1-1/2 inch.
      - 3) Surface jacket: PVC jacket (PVC finish) for exposed piping.

**END OF SECTION**

**PECIAL PROVISION**  
**SECTION 233300**  
**AIR DUCT ACCESSORIES**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section includes motorized control dampers.

**1.2 REFERENCES**

- A. NFPA 90A (National Fire Protection Association) - Installation of Air Conditioning and Ventilating Systems.
- B. NFPA 92A (National Fire Protection Association) - Smoke Control Systems.
- C. SMACNA (Sheet Metal Air Conditioning Contractors' National Association) - HVAC Duct Construction Standards - Metal and Flexible.
- D. UL 33 (Underwriters Laboratories, Inc.) - Heat Responsive Links for Fire-Protection Service.
- E. UL 555 (Underwriters Laboratories, Inc.) - Fire Dampers and Ceiling Dampers.
- F. UL 555S (Underwriters Laboratories, Inc.) - Leakage Rated Dampers for Use in Smoke Control Systems.

**1.3 SUBMITTALS**

- A. Section 013000 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit data for shop fabricated assemblies including volume control dampers, duct access doors, duct test holes, and hardware used. Include electrical characteristics and connection requirements.
- C. Manufacturer's Installation Instructions: Submit for Fire and Combination Smoke and Fire Dampers.

**1.4 CLOSEOUT SUBMITTALS**

- A. Section 017000 - Execution Requirements: Closeout procedures.
- B. Project Record Documents: Record actual locations of access doors test holes.
- C. Operation and Maintenance Data: Submit for Fire Dampers.

**1.5 DELIVERY, STORAGE, AND HANDLING**

- A. Section 016000 - Product Requirements: Product storage and handling requirements.
- B. Protect dampers from damage to operating linkages and blades.

1.6 FIELD MEASUREMENTS

- A. Verify field measurements prior to fabrication.

1.7 COORDINATION

- A. Coordinate Work where appropriate with building control Work.

1.8 WARRANTY

- A. Section 017000 - Execution Requirements: Closeout procedures

1.9 EXTRAMATERIALS

- A. Section 017000 - Execution Requirements: Demonstration and Instructions

PART 2 PRODUCTS

2.1 MOTORIZED CONTROL DAMPERS.

- A. Fabricate in accordance with SMACNA HVAC Duct Construction Standards - Metal and Flexible, and as indicated.
- B. Splitter Dampers:
  - 1. Material: Same gage as duct to 24 inches size in either direction, and two gages heavier for sizes over 24 inches.
  - 2. Blade: Fabricate of single thickness sheet metal to streamline shape, secured with continuous hinge or rod.
  - 3. Fabricate of opposed blade pattern with maximum blade sizes 8 x 72 inch.
  - 4. Assemble center and edge crimped blades in prime coated or galvanized frame channel with suitable hardware;
  - 5. End Bearings: Except in round ductwork 2 inches and smaller, provide end bearings. On multiple blade dampers, provide oil-impregnated nylon or sintered bronze bearings. Provide closed end bearings on all ducts having a pressure classification over 2 inches wg;

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify ducts and equipment installation that are ready for accessories.

**END OF SECTION**

SUPPLEMENTAL SPECIFICATION  
(Corrections, Additions, & Revisions to Standard Specifications - November 2014)

**SECTION 101**  
**CONTRACT INTERPRETATION**

101.2 Definitions

Page 1-5 – Remove the definition of Bridge in its entirety and replace with:

**“Bridge A structure that is erected over a depression or an obstruction, such as water, a highway or a railway, and has an opening measured along the centerline of the Roadway of more than 20 feet between: The faces of abutments; spring line of arches; extreme ends of openings of box culverts, pipes or pipe arches; or the extreme ends of openings for multiple box culverts, pipes or pipe arches.”**

Page 1-12 – Remove the definition of Large Culvert in its entirety and replace with:

**“Large Culvert Any structure not defined as a Culvert or Bridge that provides a drainage or non-drainage opening under the Roadway or Approaches to the Roadway, with an opening that is 5 feet but less than 10 feet.”**

Remove the definition of Minor Span in its entirety and replace with:

**“Minor Span Same definition as Bridge, except having an opening of between 10 feet and 20 feet, inclusive.”**

**SECTION 104**  
**GENERAL RIGHTS AND RESPONSIBILITIES**

104.5.5 Prompt Payment of Subcontractors Add the following paragraph to this subsection:

**C. Payment Tracking Federal Projects On federally funded projects, the prime contractor, subcontractors and lower-tier subcontractors will track and confirm the delivery and receipt of all payments through the Elation System. They will be responsible for entering all payments to all sub and lower tier contractors. MaineDOT will run a query monthly to ensure that contractors are complying and generate an e-mail to contractors who have not responded to confirm receipt of MaineDOT payment or contractor payment to lower tier subcontractors.**

**SECTION 105**  
**GENERAL SCOPE OF WORK**

105.4.5 Special Detours Remove this subsection in its entirety and replace with:

**“105.4.5 Maintenance of Existing Structures When a new Bridge or Minor Span is being installed on a new alignment and the existing structure is to remain in service, the Department will maintain the existing structure and the portions of the roadway required for maintaining traffic until such time that the new structure is opened to traffic and the existing structure is taken out of service. A similar situation exists when a new Bridge or Minor Span is being installed on the same alignment as the existing structure, requiring a temporary detour to be installed by the Contractor per Section 510, Special Detours,**

prior to removal of the existing structure. In this case, the Department will maintain the existing structure and the portions of the existing roadway required for maintaining traffic until such time that either the temporary detour is opened to traffic or the Contractor begins any work on the existing structure, including, but not limited to, repairs, modifications, moving, demolition or removal. In either case, once the new structure or temporary detour is opened to traffic, or the Contractor begins any work on the existing structure, the Contractor shall be solely responsible for all maintenance of the existing structure and the portions of the existing approaches that lie outside the new roadway or the temporary detour, respectively. This specification is not intended to supersede Standard Specification Section 104.3.11, Responsibility for Property of Others.”

## **SECTION 109** **CHANGES**

109.5.1 Definitions - Types of Delays In Paragraph ‘A’ delete “Equitable Adjustment” and replace with “adjustment of time”.

## **APPENDIX A TO DIVISION 100**

Remove Section D in its entirety as this is now covered in Section 105.10 EQUAL OPPORTUNITY AND CIVIL RIGHTS.

## **SECTION 203** **EXCAVATION AND EMBANKMENT**

### 203.02 Materials

At the bottom of page 2-12, add as the first item in the list:

**Crushed Stone, ¾ inch      703.13**

### 203.042 Rock Excavation and Blasting

On page 2-16, add the word “**No**” to the third sentence in Section 5 Submittals, Subsection V, 1 so that it reads:

**“No blasting products will be allowed on the job site if the date codes are missing.”**

**SECTION 304**  
**AGGREGATE BASE AND SUBBASE COURSE**

304.02 Aggregate

Remove the sentence “Aggregate for base and subbase courses shall be material meeting the aggregate type requirements specified in the following table” in its entirety and the table that follows it with headings of ‘Material’ and ‘Aggregate Type’.

304.02 – Aggregate Add the following sentence before the sentence starting with “When designated on the plans...”: **“Aggregate Base Course – Type C will be capped with 2” of millings or Untreated Aggregate Surface Course – Type B. Payment for this material will be made under 304.16”**

**SECTION 307**  
**FULL DEPTH RECYCLED PAVEMENT**

Remove this Section in its entirety and replace with:

**SECTION 307**  
**FULL DEPTH RECYCLING**  
**(UNTREATED OR TREATED WITH EMULSIFIED ASPHALT STABILIZER)**

**307.01 Description** This work shall consist of pulverizing a portion of the existing roadway structure into a homogenous mass, adding an emulsified asphalt stabilizer (if required) to the depth of the pulverized material specified in the contract, placing and compacting this material to the lines, grades, and dimensions shown on the plans or established by the Resident.

**MATERIALS**

**307.02 Pulverized Material** Pulverized material shall consist of the existing asphalt pavement layers and one inch or more as specified of the underlying gravel, pulverized and blended into a homogenous mass. Pulverized material will be processed to 100% passing a 2 inch square mesh sieve.

**307.021 New Aggregate and Additional Recycled Material** New aggregate, if required by the contract, shall meet the requirements of Subsection 703.10 - Aggregate for Untreated Surface Course and Leveling Course, Type A. Aggregate Subbase Course Gravel Type D processed to 100 percent passing a 2 inch square mesh sieve and meeting the requirements of 703.06 – Aggregate for Base and Subbase may be used in areas requiring depths greater than 2 inches. New aggregate, will be measured and paid for under the appropriate item.

Recycled material, if required, shall consist of salvaged asphalt material from the project or from off-site stockpiles that has been processed before use to 100 percent passing a 2 inch square mesh sieve. Recycled material shall be conditionally accepted at the source by the Resident. It shall be free of winter sand, granular fill, construction debris, or other materials not generally considered asphalt pavement.

Recycled material generated and salvaged from the project shall be used within the roadway limits to the extent it is available as described in 307.09. No additional payment will be made for material salvaged from the project.

Recycled material supplied from off-site stockpiles shall be paid for as described in the contract, or by contract modification.

**307.022 Emulsified Asphalt Stabilizer.** If required, the emulsified asphalt stabilizer shall be grade MS-2, MS-4, SS-1, or CSS-1 meeting the requirements of Subsection 702.04 Emulsified Asphalt.

**307.023 Water** Water shall be clean and free from deleterious concentrations of acids, alkalis, salts or other organic or chemical substances.

**307.024 Portland Cement** If required, Portland Cement shall be Type I or II meeting the requirements of AASHTO M85.

**307.025 Hydrated Lime** If required, Hydrated Lime shall meet the requirements of AASHTO M216.

## EQUIPMENT

**307.03 Pulverizer** The pulverizer shall be a self-propelled machine, specifically manufactured for full-depth recycling work and capable of reducing the required existing materials to a size that will pass a 2 inch square mesh sieve. The machine shall be equipped with standard automatic depth controls and must maintain a consistent cutting depth and width. The machine also shall be equipped with a gauge to show depth of material being processed.

**307.04 Liquid Mixer Unit or Distributor.** If treatment of the recycled layer with emulsified asphalt is required by the contract, a liquid mixing unit or distributor shall be used to introduce the emulsified asphalt stabilizer into the pulverized material. The mixing unit shall contain a liquid distribution and mixing system which has been specifically manufactured for full-depth recycling work, capable of mixing the pulverized material with an evenly metered distribution of emulsified asphalt into a homogeneous mixture, to the depth and width required.

The mixing unit shall be designed, equipped, maintained, and operated so that emulsified asphalt stabilizer at constant temperature may be applied uniformly on variable widths of pulverized material up to 6 feet at readily determined and controlled rates from 0.01 to 1.06 gal/yd<sup>2</sup> with uniform pressure and with an allowable variation from any specified rate not to exceed 0.01 gal/ yd<sup>2</sup>. Mixing units shall include a tachometer, pressure gages, and accurate volume measuring devices or a calibrated tank and a thermometer for measuring temperatures of tank contents.

**307.041 Cement or Lime Spreader** If required by the contract, spreading of the Portland Cement or Hydrated Lime shall be done with a spreader truck designed to spread dry particulate (such as Portland Cement or Lime) or other approved means to insure a uniform distribution across the roadway and minimize fugitive dust. Pneumatic

application, including through a slotted pipe, will not be permitted. Other systems that have been developed include fog systems, vacuum systems, etc. Slurry applications may also be accepted. The Department reserves the right to accept or reject the method of spreading cement. The Contractor shall provide a method for verifying that the correct amount of cement is being applied.

**307.05 Placement Equipment** Placement of the Full Depth recycled material to the required slope and grade shall be done with an approved highway grader or by another method approved by the Resident.

**307.06 Rollers** The full depth recycled material shall be rolled with a vibratory pad foot roller, a vibratory steel drum soil compactor and a pneumatic tire roller. The pad foot roller drum shall have a minimum of 112 tamping feet 3 inches in height, a minimum contact area per foot of 17 inch<sup>2</sup>, and a minimum width of 84 inches. The vibratory steel drum roller shall have a minimum 84 inch width single drum. The pneumatic tire roller shall meet the requirements of Section 401.10 and the minimum allowable tire pressure shall be 85 psi.

### MIX DESIGN

If treatment of the recycled layer with emulsified asphalt is required by the contract, the Department will supply a mix design for the emulsified asphalt stabilized material based on test results from pavement and soil analysis taken to the design depth. The Department will provide the following information prior to construction:

1. Percent of emulsified asphalt to be used.
2. Quantity of lime or cement to be added.
3. Optimum moisture content for proper compaction.
4. Additional aggregate (if required).

After a test strip has been completed or as the work progresses, it may be necessary for the Resident to make necessary adjustments to the mix design. Changes to compensation will be in accordance with the Mix Design Special Provision.

### CONSTRUCTION REQUIREMENTS

**307.06 Pulverizing** The entire depth of existing pavement shall be pulverized together with 1 inch or more of the underlying gravel into a homogenous mass. All pulverizing shall be done with equipment that will provide a homogenous mass of pulverized material, processed in-place, which will pass a 2 inch square mesh sieve.

**307.07 Weather Limitations** Full depth recycled work shall be performed when;

- A. Recycling operations will be allowed between May 15<sup>th</sup> and September 15<sup>th</sup> inclusive in Zone 1 - Areas north of US Route 2 from Gilead to Bangor and north of Route 9 from Bangor to Calais.
- B. The atmospheric temperature, as determined by an approved thermometer placed in the shade at the recycling location, is 50°F and rising.

- C. When there is no standing water on the surface.
- D. During generally dry conditions, or when weather conditions are such that proper pulverizing, mixing, grading, finishing and curing can be obtained using proper procedures, and when compaction can be accomplished as determined by the Resident.
- E. When the surface is not frozen and when overnight temperatures are expected to be above 32°F.
- F. Wind conditions are such that the spreading of lime or cement on the roadway ahead of the recycling machine will not adversely affect the operation.

**307.08 Surface Tolerance** The complete surface of the Full Depth Recycled course shall be shaped and maintained to a tolerance, above or below the required cross sectional shape, of  $\frac{3}{8}$  inch.

**307.09 Full Depth Recycling Procedure** New aggregate or recycled material meeting the requirements of Section 307.021 - New Aggregate and Additional Recycled Material, shall be added as necessary to restore cross-slope and/or grade before pulverizing. Locations will be shown on the plans or described in the construction notes. The Resident may add other locations while construction of the project is in progress. The Contractor will use recycled material to the extent it is available, in lieu of new aggregate. The material shall then be pulverized, processed, and blended into a homogeneous mass passing a 2 inch square mesh sieve. Material found not pulverized down to a 2 inch size will be required to be reprocessed by the recycler with successive passes until approved by the Resident.

Should the Contractor be required to add new aggregate or recycled material to restore cross-slope and/or grade after the initial pulverizing process, those areas will require re-processing to blend into a homogenous mass passing a 2 in square mesh sieve.

Sufficient water shall be added during the recycling process to maintain optimum moisture for compaction.

The resultant material from the initial pulverizing processes shall be graded and compacted to the cross-slope and profile shown on the plans or as directed by the Resident. The Contractor will also be responsible for re-establishing the existing profile grade. The completed surface of the full depth recycled course shall be shaped and maintained to a tolerance, above or below the required cross sectional shape, of  $\frac{3}{8}$  inch. Areas not meeting this tolerance will be repaired as described in Section 307.091. The initial pulverizing process density requirements will be the same as Section 307.101 unless otherwise directed by the Resident.

Additives, if required, shall be introduced following completion of the initial pulverizing and blending process. Emulsified asphalt stabilizer shall be incorporated into the top of the processed material as specified in section 307.04 to the depth specified in the contract by use of the liquid mixer unit or a distributor, at the rate specified in the mix design. The emulsified asphalt shall then be uniformly blended into a homogeneous mass until an apparent uniform distribution has occurred. The rate of application may be adjusted as necessary by the Resident. Cement or lime shall be introduced as described in section

**307.041.** The resultant material shall be graded and compacted to the cross-slope and profile shown on the plans or as directed by the Resident. The Contractor will also be responsible for re-establishing the existing profile grade.

After final compaction, the roadway surface shall be treated with a light application of water, and rolled with pneumatic-tired rollers to create a close-knit texture. The finished layer shall be free from:

- A. Surface laminations.
- B. Segregation of fine and coarse aggregate.
- C. Corrugations, centerline differential, potholes, or any other defects that may adversely affect the performance of the layer, or any layers to be placed upon it.

The Contractor shall protect and maintain the recycled layer until a lift of pavement is applied. Any damage or defects in the layer shall be repaired immediately. An even and uniform surface shall be maintained. The recycled surface shall be swept prior to hot mix asphalt overlay placement.

**307.091 Repairs** Repairs and maintenance of the recycled layers, resulting from damage caused by traffic, weather or environmental conditions, or resulting from damage caused by the Contractor's operations or equipment, shall be completed at no additional cost to the Department.

For recycled layers stabilized with emulsified asphalt, low areas will be repaired using a hot mix asphalt shim. Areas up to 1 inch high can be repaired by milling or shimming with hot mix asphalt. Areas greater than 1 inch high will be repaired using a hot mix asphalt shim. All repair work will be done with the Resident's approval at the Contractor's expense.

## **TESTING REQUIREMENTS**

**307.10 Quality Control** The Contractor shall operate in accordance with the approved Quality Control Plan (QCP) to assure a product meeting the contract requirements. The QCP shall meet the requirements of Section 106.4 - Quality Control and this Section. The Contractor shall not begin recycling operations until the Department approves the QCP in writing.

Prior to performing any recycling process, the Department and the Contractor shall hold a Pre-recycle conference to discuss the recycling schedule, type and amount of equipment to be used, sequence of operations, and traffic control. A copy of the QC random numbers to be used on the project shall be provided to the Resident. All field supervisors including the responsible onsite recycling process supervisor shall attend this meeting.

The QCP shall address any items that affect the quality of the Recycling Process including, but not limited to, the following:

- A. Sources for all materials, including New Aggregate and Additional Recycled Material.
- B. Make and type of rollers including weight, weight per inch of steel wheels, and average contact pressure for pneumatic tired rollers.
- C. Testing Plan.
- D. Recycling operations including recycling speed, methods to ensure that segregation is minimized, grading and compacting operations.
- E. Methods for protecting the finished product from damage and procedures for any necessary corrective action.
- F. Method of grade checks.
- G. Examples of Quality Control forms.
- H. Name, responsibilities, and qualifications of the Responsible onsite Recycling Supervisor experienced and knowledgeable with the process.
- I. A note that all testing will be done in accordance with AASHTO and MDOT/ACM procedures.

The Project Superintendent shall be named in the QCP, and the responsibilities for successful implementation of the QCP shall be outlined.

The Contractor shall sample, test, and evaluate the full depth reclamation process in accordance with the following minimum frequencies:

**MINIMUM QUALITY CONTROL FREQUENCIES**

Test or Action	Frequency	Test Method
Density	1 per 1000 feet / lane	AASHTO T 310
Air Temperature	4 per day at even intervals	
Surface Temperature	At the beginning and end of each days operation	
Yield of all materials (Daily yield, yield since last test, and total project yield.)	1 per 1000 ft/lane	

The Department may view any QC test and request a QC test at any time. The Contractor shall submit all QC test reports and summaries in writing, signed by the appropriate technician, to the Department’s onsite representative by 1:00 P.M. on the next working day, except when otherwise noted in the QCP due to local restrictions. The Contractor shall make all test results, including randomly sampled densities, available to the Department onsite.

The Contractor shall cease recycling operations whenever one of the following occurs:

- A. The Contractor fails to follow the approved QCP.
- B. The Contractor fails to achieve 98 percent density after corrective action has been taken.
- C. The finished product is visually defective, as determined by the Resident.

- D. The computed yield differs from the mix design by 10 percent or more.

Recycling operations shall not resume until the Department approves the corrective action to be taken.

**307.101 Test Strip** The contractor shall assemble all items of equipment for the recycling operation on the first day of the recycling work. The Contractor shall construct a test strip for the project at a location approved by the Resident. The Responsible onsite Recycling Supervisor will work with Department personnel to determine the suitability of the mixed material, moisture control within the mixed material, and compaction and surface finish. The test strip section is required to:

- A. Demonstrate that the equipment and processes can produce recycled layers to meet the requirements specified in these special provisions.
- B. Determine the effect on the gradation of the recycled material by varying the forward speed of the recycling machine and the rotation rate of the milling drum.
- C. Determine the optimum moisture necessary to achieve proper compaction of the recycled layer.
- D. Determine the sequence and manner of rolling necessary to obtain the compaction requirements and establish a target density. The Contractor and the Department will both conduct testing with their respective gauges at this time.

The test strip shall be at least 300 feet in length of a full lane-width (or a half-road width). Full recycling production will not start until a passing test strip has been accomplished. If a test strip fails to meet the requirements of this specification, the Contractor will be required to repair or replace the test strip to the satisfaction of the Resident. Any repairs, replacement, or duplication of the test strip will be at the Contractor's expense.

After the test strip has been pulverized, and the roadway brought to proper shape, the Contractor shall add water until it is determined that optimum moisture has been obtained. The test strip shall then be rolled using the specified compaction equipment as directed until the density readings show an increase in dry density of less than 1 pcf for the final four roller passes of each roller. The Contractor and Department will each determine a target density using their respective gauges by performing several additional density tests and averaging them. The average of these tests will be used as the target density of the recycled material for QC and Acceptance purposes.

Following completion of the test strip, compaction of the material shall continue until a density of not less than 98 percent of the test strip target density has been achieved for the full width and depth of the layer. During the construction and compaction of the Full Depth Recycled base, should three consecutive Acceptance test results for density fail to meet a minimum of 95 percent of the target density, or exceed 102 percent of target density, a new test strip shall be constructed.

#### ACCEPTANCE TEST FREQUENCY

Property	Frequency	Test Method
In-place Density	1 per 2000 ft / lane	AASHTO T 310

**308.102 Curing.** No new pavement shall be placed on the full depth recycled pavement until curing has reduced the moisture content to 1 percent or less by total weight of the mixture, or a curing period of 4 days has elapsed, whichever comes first.

**307.11 Method of Measurement** Full Depth Recycled Pavement (Untreated or Treated with Emulsified Asphalt Stabilizer) will be measured by the square yard.

**307.12 Basis of Payment** The accepted quantity of Full Depth Recycled Asphalt Pavement (Untreated or Treated with Emulsified Asphalt Stabilizer) will be paid for at the contract unit price per square yard, complete in-place which price will be full compensation for furnishing all equipment, materials and labor for pulverizing, blending, placing, grading, compacting, and for all incidentals necessary to complete the work.

The addition of materials to restore profile grade and/or cross-slope in areas shown on the plans or described in the construction notes will be paid separately under designated pay items within the contract. No additional payment will be made for materials salvaged from the project.

Payments will be made under:

<b><u>Pay Item</u></b>	<b><u>Pay Unit</u></b>
<b>307.331 Full Depth Recycled Pavement (Untreated) Yard</b>	<b>Square</b>
<b>307.332 Full Depth Recycled Pavement (with Emulsified Asphalt Stabilizer) 5 in. depth Yard</b>	<b>Square</b>
<b>307.333 Full Depth Recycled Pavement (with Emulsified Asphalt Stabilizer) 6 in. depth Yard</b>	<b>Square</b>

**SECTION 411**  
**UNTREATED AGGRAGATE SURFACE COURSE**

**411.02 – Aggregate** Add the following to the end of the first sentence: “- Type A”

**SECTION 502**

## STRUCTURAL CONCRETE

### 502.05 Composition and Proportioning

Replace Table 1 with

TABLE 1

Concrete CLASS	Minimum Compressive Strength (PSI)	Permeability as indicated by Surface Resistivity (KOhm-cm)	Entrained Air (%)		Notes
			LSL	USL	
S	3,000	LSL	LSL	USL	4,5
		N/A	N/A	N/A	
A	4,000	14	6.0	9.0	1,4,5
P	-----	-----	5.5	7.5	1,2,3,4
LP	5,000	17	6.0	9.0	1,4,5
Fill	3,000	N/A	6.0	9.0	4,5

In the list of information submitted by the contractor for a mix design:

Item J Replace “Target Coulomb Value.” with “Target KOhm-cm Value.”

### 502.1703 Acceptance Methods A and B

In the paragraph that starts with “The Department will take Acceptance...” Remove the word chloride from chloride permeability in the last sentence.

Replace the paragraph starting with “Rapid Chloride Permeability specimens...” With the following:

“Surface Resistivity specimens will be tested by the Department in accordance with AASHTO TP-95 at an age  $\geq$  56 days. Four 4 inch x 8 inch cylinders will be cast per subplot placed. The average of three concrete specimens per subplot will constitute a test result and this average will be used to determine the permeability for pay adjustment computations.”

### 502.1706 Acceptance Method C

Remove in its entirety and Replace with:

**502.1706 Acceptance Method C The Department will determine the acceptability of the concrete through Acceptance testing. Acceptance tests will include compressive strength, air content and permeability. Method C concrete with a failing permeability as indicated by the surface resistivity test may be tested for permeability in accordance with the Rapid Chloride Permeability Test AASHTO T-277 averaging the results from two specimens cut from the samples prepared for the surface resistivity test. Method C concrete not meeting the requirements listed in Table 1 or if the Rapid Chloride Permeability test results in values exceeding 2000 coulombs for Class LP or 2400 for Class A, shall be removed and replaced at no cost to the Department. At the**

**Department's sole discretion, material not meeting requirements may be left in place and paid for at a reduced price as described in Section 502.195.**

502.1707 Resolution of Disputed Acceptance Test Results

Section B

Remove "Rapid Chloride" from the section heading.

In paragraph 4 replace T-277 with TP-95

502.192 Pay Adjustment for Chloride Permeability

Remove "Chloride" from the heading and from the first sentence.

Replace the sentence that starts with "values greater than..." and replace with "values less than 10 KOHms-cm for Class A concrete or 11 KOHms-cm for Class LP concrete shall be subject to rejection and replacement, at no additional cost to the Department."

502.194 Pay Adjustments for Compressive Strength, Chloride Permeability and Air Content, Methods A and B

Remove the word "Chloride" from the section heading and from the equation for CPF.

502.195 Pay Adjustment Method C

Table 6: Method C Pay Reductions (page 5-53)

Under "Entrained Air" for "Class Fill", in the first line, change from "< 4.0 (Removal)" to "< **4.5 (Removal)**"

In Table 6: Method C PAY REDUCTIONS remove the word 'Chloride' from 'Chloride Permeability'.

**SECTION 619**  
**MULCH**

619.07 Basis of Payment

In the list of Pay Items add "**619.12 Mulch**" with a Pay Unit of "**Unit**".

Change the description of 619.1201 from "Mulch" to "**Mulch – Plan Quantity**"

**SECTION 621**  
**LANDSCAPING**

621.0002 Materials - General

In the list of items change "Organic Humus" to "**Humus**".

621.0019 Plant Pits and Beds

c Class A Planting

In the third paragraph beginning with “ The plant pit...” change “½ inch” to “**1 inch**”

**SECTION 626**

**FOUNDATIONS, CONDUIT AND JUNCTION BOXES FOR HIGHWAY  
SIGNING, LIGHTING AND SIGNALS**

626.034 Concrete Foundations

On Page 6-85, add the following paragraph before the paragraph beginning with “Drilled shafts shall not be...”.

**No foundation design will be required for 18- and 24-inch diameter foundations for structures less than 30-feet tall and with no projecting arms. A foundation design prepared by a Professional Engineer licensed in accordance with the laws of the State of Maine will be required for all other foundations. Precast foundations will be permitted for 18 and 24-inch diameter foundations for structures less than 30-feet tall and with no projecting arms. Where precast foundations are permitted flowable concrete fill shall be used as backfill in the annular space, and placed from the bottom up. Construction of precast foundations shall conform to the Standard Details and all requirements of Section 712.061 except that the concrete shall have a minimum permeability of 17 kOhm-cm and the use of calcium nitrite will not be required.**

On Page 6-86, add the following to the paragraph beginning with “Concrete for drilled shafts...” so that it reads as follows:

**“...The Contractor shall provide temporary dewatering of excavations for foundations such that concrete is placed in the dry. Concrete for drilled shafts shall be placed in accordance with Section 503.10 as temporary casing is withdrawn to prevent debris from contaminating the foundation and to ensure concrete is cast against the surrounding soil. Concrete for drilled shafts and spread footings shall be Class A in accordance with Section 502 - Structural Concrete. Precast foundations will not be permitted except as specified above in this Section. Backfill for spread footing foundations shall be Gravel Borrow meeting the requirements of Section 703.20 - Gravel Borrow.....”**

**SECTION 660**

**ON-THE-JOB TRAINING**

660.06 Method of Measurement

Remove the first sentence in its entirety and replace with “ **The OJT item will be measured by the number of OJT hours by a trainee who has successfully completed an approved training program.**”

660.07 Basis of payment to the Contractor

Remove the last word in the first sentence so that the first sentence reads “ The OJT shall be paid for once successfully completed at the contract unit price per **hour.**”

Payment will be made under

Change the Pay Item from “660.22” to “**660.21**” and change the Pay Unit from “Each” to “**Hour**”.

**SECTION 703**  
**AGGREGATES**

703.06 Aggregate for Base and Subbase

Remove the first two paragraphs in their entirety and replace with these:

**“The following shall apply to Sections (a.) and (c.) below. The material shall have a Micro-Deval value of 25.0 or less as determined by AASHTO T 327. If the Micro- Deval value exceeds 25.0, the Washington State Degradation DOT Test Method T113, Method of Test for Determination of Degradation Value (January 2009 version) shall be performed, except that the test shall be performed on the portion of the sample that passes the ½ in sieve and is retained on the No. 10 sieve. If the material has a Washington Degradation value of less than 15, the material shall be rejected.**

**The material used in Section (b.) below shall have a Micro-Deval value of 25.0 or less as determined by AASHTO T 327. If the Micro-Deval value exceeds 25.0 the material may be used if it does not exceed 25 percent loss on AASHTO T 96, Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine. “**

703.33 Stone Ballast

In the third paragraph, remove the words “ less than” before 2.60 and add the words “**or greater**” after 2.60.

**SECTION 717**  
**ROADSIDE IMPROVEMENT MATERIAL**

717.02 Agricultural Ground Limestone

In the table after the third paragraph which starts with “Liquid lime...” change the Specification for Nitrogen (N) from “15.5 percent of which 1% is from ammoniac nitrogen and 14.5 /5 is from Nitrate Nitrogen” to read “**15.5 % of which 1% is from Ammoniacal Nitrogen and 14.5 % is from Nitrate Nitrogen**”

SPECIAL PROVISIONS  
ADDITIONS AND REVISIONS TO STANDARD SPECIFICATIONS

SPECIAL PROVISION SECTION 102  
BIDDING

102.6 Bid Guaranty Delete the entire section 102.6.

SPECIAL PROVISION SECTION 103  
AWARD AND CONTRACTING

103.5 Award Conditions Replace the first paragraph with the following:

The Apparent Successful Bidder must provide and/or perform all of the items listed in this Section 103.5 within 14 Days of Receipt of the Notice of Intent to Award. Unless indicated otherwise, all items must be Delivered to the Department's Bureau of Maintenance & Operations.

103.5.1 Performance and Payment Bonds Delete the entire section 103.5.1.

103.5.4 Execution of Contract By Bidder Delete the entire section and replace with the following:

“The properly completed and signed Contract form provided with the Bid constitutes the Bidder's offer. Once the Department has received the bonds (if applicable), insurance, and any other pre-award items required, the Department will sign and execute the Contract. The point of Contract execution is when the Contractor receives written notice that the contract has been signed by the Department and executed.”

SPECIAL PROVISION SECTION 104  
GENERAL RIGHTS AND RESPONSIBILITIES

104.3.8A. Federal Wage Rates and Labor Laws Delete the entire section 104.3.8A. Federal Wage Rates do not apply to this work.

104.3.8B State Wage Rates and Labor Laws The State Wage Rates enclosed apply to this work. Federal Wage Rates do not apply to this work.

SPECIAL PROVISION SECTION 105  
GENERAL SCOPE OF WORK

105.2.2 Health and Safety Plan Delete the entire section and replace with the following:

A copy of the Contractor's Health and Safety Plan must be on file with the Department to be awarded a Construction Contract. If a copy of the Contractor's Health and Safety Plan is not on file with the Contracts Section of the Department, the Contractor must submit a compliant copy of the Contractor's Health Safety Plan to the Department's Bureau of Maintenance & Operations in an electronic media format prior to Contract award. The Contractor's Health and Safety Plan shall identify and address job hazards of the expected contract work and shall comply with all applicable federal, State, and local laws governing safety including all applicable laws and regulations of OSHA. The Contractor shall designate which portions such submissions it considers confidential business information. If such program is revised during the Contract Time, the Contractor shall provide the updated program to the Department. The Contractor shall comply with its safety program and this Section 105.2 - Health and Safety. The Contractor shall be responsible for all claims or damages arising from failure to so comply and indemnifies and holds harmless the Department from all claims and damages arising from such non-compliance.

SPECIAL PROVISION SECTION 107  
TIME

Delete the entire section 107.4 (or the entire section 107) and replace with the following:

107.4.1 General Duty of Contractor The Contractor is solely responsible for the planning and execution of Work in order to complete the Work within the Contract Time.