

Salt Shed

Athens

WIN: 025818.00

2020

Updated 4/29/2020

STATE PROJECT

MAINTENANCE & OPERATIONS

BIDDING INSTRUCTIONS

1. Use pen and ink to complete all paper Bids. Signatures shall be original. Stamped and copied signatures will not be accepted.
2. As a minimum, the following must be received prior to the time of Bid opening:

For a Paper Bid:

- a) a copy of the Notice to Contractors, b) the completed Acknowledgement of Bid Amendments form, c) the completed Schedule of Items, d) two copies of the completed and signed Contract Agreement, Offer & Award form, e) a Bid Guaranty, f) the completed Contractor Information Sheet, and g) any other certifications or Bid requirements listed in the Bid Documents as due by Bid opening.

For an Electronic Bid:

- a) a completed Bid using Expedite® software and submitted via the Bid Express™ web-based service, b) an electronic Bid Guaranty (if required) or a faxed copy of a Bid Bond (with original to be delivered within 72 hours), and c) 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. Bid Guaranty acceptable forms are:
 - a) a properly completed and signed Bid Bond on the Department's prescribed form (or on a form that does not contain any significant variations from the Department's form as determined by the Department) for 5% of the Bid Amount or
 - b) an Official Bank Check, Cashier's Check, Certified Check, U.S. Postal Money Order or Negotiable Certificate of Deposit in the amount stated in the Notice to Contractors or
 - c) an electronic bid bond submitted with an electronic bid.
5. All Bid Packages which are mailed or sent express, shall be provided in double (one envelope inside the other) envelopes, for security and other reasons. The *Inner Envelope* shall have the following information provided on it:
 - Bid Enclosed - Do Not Open
 - WIN:
 - Towns:
 - 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
- WIN:
- Towns:
- Date of Bid Opening:
- Name of Contractor:

If a paper Bid is to be sent express, please take note that overnight services do not always arrive in time and that delivery may be affected by carrier volume, weather and other factors. Packages using express services should be sent directly to the DOT Headquarters Building, Maine Department of Transportation, 24 Child Street, Augusta. "FedEx First Overnight" delivery is suggested as the package is delivered directly to the DOT Headquarters Building, Mailroom, 24 Child Street, Augusta. Allow extra days for U.S. Postal Service Express Mail which has proven not to be reliable and sometimes does not deliver directly to the DOT Headquarters Building but instead delivers to the State of Maine Mail Distribution Center.

If a paper bid is to be mailed, the mailing address is Maine Department of Transportation, 16 State House Station, Augusta, ME 04333-0016. Allow additional working days for this mail to pass through the state mail system in addition to the US Postal Service as this mail is not delivered directly to the Department of Transportation.

If a paper Bid is to be hand carried, deliver directly to the “Public Entrance” which is located on the Capitol Street side of the DOT Headquarters Building in Augusta. <http://www.maine.gov/mdot/contact>. Hand-carried Bids may be in one envelope, and should be marked with the following information:

Bid Enclosed: Do Not Open

WIN:

Towns:

Date of Bid Opening:

Name of Contractor:

Bids are not accepted by email or FAX.

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 Specifications, March 2020 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. 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.

The downloading of bid packages from the MDOT website is not the same as providing an electronic bid to the Department. Electronic bids must be submitted via <http://www.BIDX.com>. For information on electronic bidding contact Rebecca Snowden at rebecca.snowden@maine.gov or Diane Barnes at diane.barnes@maine.gov.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
Bid Guaranty-Bid Bond Form

KNOW ALL MEN BY THESE PRESENTS THAT _____

_____, of the City/Town of _____ and State of _____

as Principal, and _____ as Surety, a

Corporation duly organized under the laws of the State of _____ and having a usual place of

Business in _____ and hereby held and firmly bound unto the Treasurer of

the State of Maine in the sum of _____, for payment which Principal and Surety bind

themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

The condition of this obligation is that the Principal has submitted to the Maine Department of

Transportation, hereafter Department, a certain bid, attached hereto and incorporated as a

part herein, to enter into a written contract for the construction of _____

_____ and if the Department shall accept said bid

and the Principal shall execute and deliver a contract in the form attached hereto (properly

completed in accordance with said bid) and shall furnish bonds for this faithful performance of

said contract, and for the payment of all persons performing labor or furnishing material in

connection therewith, and shall in all other respects perform the agreement created by the

acceptance of said bid, then this obligation shall be null and void; otherwise it shall remain in full

force, and effect.

Signed and sealed this _____ day of _____ 20____

WITNESS:

WITNESS

PRINCIPAL:

By _____

By: _____

By: _____

SURETY:

By _____

By: _____

Name of Local Agency: _____

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.

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 "Bids for **Salt Shed Construction** in the town of **Athens**" 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 **May 20, 2020** and at that time and place publicly opened and read. Bids will be accepted from all bidders. The lowest responsive bidder must have completed, or successfully complete, a Building or project specific prequalification to be considered for the award of this contract. **We now accept electronic bids for those bid packages posted on the bidx.com website. Electronic bids do not have to be accompanied by paper bids. Please note: the Department will accept a facsimile of the bid bond; however, the original bid bond must then be received at the MDOT Contract Section within 72 hours of the bid opening.** Until further notice, dual bids (one paper, one electronic) will be accepted, with the paper copy taking precedence.

Description: WIN: 025818.00

Location: In Somerset County, project is located at 177 Harmony Road, Athens.

Outline of Work: Constructing a salt shed and other incidental work.

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, 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, 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, plans, specifications and bid forms can be viewed and obtained digitally at no cost at <http://www.maine.gov/mdot/contractors/>. Plans, specifications and bid forms may be seen at the Maine DOT Building in Augusta, Maine and at the Department of Transportation's Regional Office in Wilton, Maine. They may be purchased from the Department between the hours of 8:00 a.m. to 4:30 p.m. by cash, credit card (Visa/Mastercard) or check payable to Treasurer, State of Maine sent to Maine Department of Transportation, Attn.: Mailroom, 16 State House Station, Augusta, Maine 04333-0016. They also may be purchased by telephone at (207) 624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Full size plans \$13.00 (\$16.30 by mail). Half size plans \$6.50 (\$8.75 by mail), Bid Book \$10 (\$13 by mail), Single Sheets \$2, payment in advance, all non-refundable.

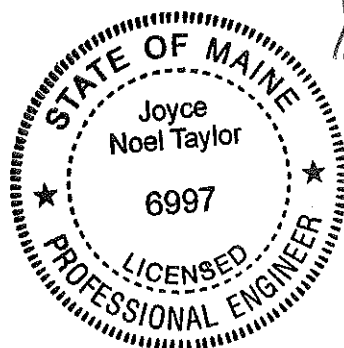
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of \$12,000.00 payable to Treasurer, State of Maine as a Bid guarantee. A Contract Performance Surety Bond and a Contract Payment Surety Bond, each in the amount of 100 percent of the Contract price, will be required of the successful Bidder

This Contract is subject to all applicable State Laws.

All work shall be governed by *State of Maine, Department of Transportation, Standard Specifications, March 2020 Edition*, price \$10 [\$15 by mail], and *Standard Details, March 2020 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
April 29, 2020



A handwritten signature in black ink that reads "Joyce Noel Taylor".

JOYCE NOEL TAYLOR, P. E.
CHIEF ENGINEER

**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)

4/10/2020

Maine Department of Transportation

Proposal Schedule of Items

Page 1 of 1

Proposal ID: 025818.00

Project(s): 025818.00

SECTION: 1 BUILDING

Alt Set ID: Alt Mbr ID:

Contractor: _____

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0010	815.00 BUILDING - SALT STORAGE BUILDING	LUMP SUM	LUMP	SUM	_____	_____
		Section: 1	Total:		_____	_____
			Total Bid:		_____	_____

Paper bids shall be signed in pen and ink. Stamped and copied signatures will not be accepted.

(Print Respondent's Name and Title)

Signature

Date

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 025818.00 for Salt Shed Construction in the town of Athens, County of Somerset**, 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 **September 4, 2020**. 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, March 2020 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 of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is _____

\$ _____ Performance Bond and Payment Bond each being 100% of the amount of this Contract.

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, March 2020 Edition, Standard Details March 2020 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 March 2020 Edition*, *Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

WIN 025818.00 for Salt Shed Construction in the town of Athens, County of Somerset

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, March 2020 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 March 2020 Edition* and complete the Work within the time limits given in the Special Provisions of this Contract.

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

Fifth: 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: Bruce A. Van Note, Commissioner

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 025818.00 for Salt Shed Construction in the town of Athens, County of Somerset**, 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 **September 4, 2020**. 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, March 2020 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 of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is _____

\$ _____ Performance Bond and Payment Bond each being 100% of the amount of this Contract.

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, March 2020 Edition, Standard Details March 2020 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 March 2020 Edition*, *Standard Details March 2020 Edition* as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

WIN 025818.00 for Salt Shed Construction in the town of Athens, County of Somerset

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, March 2020 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 March 2020 Edition* and complete the Work within the time limits given in the Special Provisions of this Contract.

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

Fifth: 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: Bruce A. Van Note, Commissioner

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.0112345.00, 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, March 2020 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 of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is (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) Performance Bond and Payment Bond each being 100% of the amount of this Contract.

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, March 2020 Edition, Standard Details March 2020 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 March 2020 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, March 2020 Edition, Standard Details March 2020 Edition*, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

PIN 012345.00 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, March 2020 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 March 2020 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: Bruce A. Van Note, Commissioner

(Witness)

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

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

2020 Fair Minimum Wage Rates
Building 2 Somerset County
(other than 1 or 2 family homes)

<u>Occupation Title</u>	<u>Minimum Wage</u>	<u>Minimum Benefit</u>	<u>Total</u>	<u>Occupation Title</u>	<u>Minimum Wage</u>	<u>Minimum Benefit</u>	<u>Total</u>
Asbestos/Lead Removal Worker	\$15.63	\$1.09	\$16.72	Ironworker - Structural	\$21.35	\$2.13	\$23.48
Boilermaker	\$30.00	\$10.86	\$40.86	Laborers (Helpers & Tenders)	\$15.50	\$0.35	\$15.85
Boom Truck (Truck Crane) Operator	\$25.00	\$4.94	\$29.94	Laborer - Skilled	\$17.00	\$1.88	\$18.88
Bricklayer	\$26.00	\$3.17	\$29.17	Line Erector Power/Cable Splicer	\$31.00	\$3.42	\$34.42
Carpenter	\$20.75	\$3.15	\$23.90	Loader Operator - Front-End	\$20.00	\$3.12	\$23.12
Carpenter - Acoustical	\$20.00	\$3.63	\$23.63	Mechanic- Maintenance	\$18.00	\$1.79	\$19.79
Carpenter - Rough	\$19.25	\$0.00	\$19.25	Mechanic- Refrigeration	\$27.00	\$5.13	\$32.13
Cement Mason/Finisher	\$16.00	\$4.04	\$20.04	Millwright	\$24.00	\$10.26	\$34.26
Communication Equip Installer	\$26.47	\$16.78	\$43.25	Oil/Fuel Burner Servicer/Installer	\$28.50	\$8.01	\$36.51
Crane Operator =>15 Tons)	\$30.00	\$7.76	\$37.76	Painter	\$16.13	\$0.00	\$16.13
Dry-Wall Applicator	\$25.00	\$0.00	\$25.00	Paver Operator	\$20.50	\$0.44	\$20.94
Dry-Wall Taper & Finisher	\$23.50	\$0.48	\$23.98	Pipe/Steam/Sprinkler Fitter	\$24.00	\$2.85	\$26.85
Electrician - Licensed	\$26.50	\$6.16	\$32.66	Plumber (Licensed)	\$27.00	\$4.51	\$31.51
Electrician Helper/Cable Puller	\$16.00	\$1.38	\$17.38	Plumber Helper/Trainee	\$19.00	\$3.33	\$22.33
Elevator Constructor/Installer	\$59.47	\$24.57	\$84.04	Propane & Natural Gas Serv/ Inst	\$27.00	\$3.79	\$30.79
Excavator Operator	\$21.43	\$4.13	\$25.56	Roofer	\$17.49	\$1.56	\$19.05
Fence Setter	\$19.75	\$4.10	\$23.85	Sheet Metal Worker	\$21.75	\$5.59	\$27.34
Flagger	\$13.00	\$0.00	\$13.00	Sider	\$17.00	\$0.41	\$17.41
Floor Layer	\$20.00	\$0.03	\$20.03	Tile Setter	\$22.00	\$1.36	\$23.36
Glazier	\$18.00	\$0.96	\$18.96	Truck Driver - Light	\$16.00	\$0.44	\$16.44
Heating (HVAC)	\$25.19	\$2.78	\$27.97	Truck Driver - Medium	\$19.00	\$1.97	\$20.97
Industrial Truck (Forklift) Operator	\$27.42	\$6.26	\$33.68	Truck Driver - Heavy	\$18.63	\$0.98	\$19.61
Insulation Installer	\$20.50	\$2.89	\$23.39	Truck Driver - Tractor Trailer	\$17.50	\$0.94	\$18.44
Ironworker - Ornamental	\$26.00	\$22.37	\$48.37	Truck Driver - (Cement)	\$17.25	\$2.26	\$19.51
Ironworker - Reinforcing	\$29.45	\$23.49	\$52.94				

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.

Title 26 §1310 requires that a clearly legible statement of all fair minimum wage and benefits rates to be paid the several classes of laborers, workers and mechanics employed on the construction on the public work must be kept posted in a prominent and easily accessible place at the site by each contractor and subcontractor subject to sections 1304 to 1313.

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.

A true copy

Attest: Scott R. Cotnoir
Scott R. Cotnoir
Wage & Hour Director
Bureau of Labor Standards

BOND # _____

CONTRACT PERFORMANCE BOND
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That _____
_____ in the State of _____, as principal,
and.....
a corporation duly organized under the laws of the State of and having a
usual place of business
as Surety, are held and firmly bound unto the Treasurer of the State of Maine in the sum
of _____ and 00/100 Dollars (\$ _____),
to be paid said Treasurer of the State of Maine or his successors in office, for which
payment well and truly to be made, Principal and Surety bind themselves, their heirs,
executors and administrators, successors and assigns, jointly and severally by these
presents.

The condition of this obligation is such that if the Principal designated as Contractor in
the Contract to construct Project Number _____ in the Municipality of
_____ promptly and faithfully performs the Contract, then this
obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the State
of Maine.

Signed and sealed this day of, 20.....

WITNESSES:

SIGNATURES:

CONTRACTOR:

Signature.....

.....

Print Name Legibly

Print Name Legibly

SURETY:

Signature

.....

Print Name Legibly

Print Name Legibly

SURETY ADDRESS:

NAME OF LOCAL AGENCY:

.....

ADDRESS

.....

.....

.....

.....

TELEPHONE.....

.....

BOND # _____

CONTRACT PAYMENT BOND
(Surety Company Form)

KNOW ALL MEN BY THESE PRESENTS: That _____
_____ **in the State of** _____, as principal,
and.....

a corporation duly organized under the laws of the State of and having a
usual place of business in
as Surety, are held and firmly bound unto the Treasurer of the State of Maine for the use
and benefit of claimants as herein below defined, in the sum of
_____ **and 00/100 Dollars (\$** _____ **)**
for the payment whereof Principal and Surety bind themselves, their heirs, executors and
administrators, successors and assigns, jointly and severally by these presents.

The condition of this obligation is such that if the Principal designated as Contractor in
the Contract to construct Project Number _____ in the Municipality of
_____ promptly satisfies all claims and demands incurred for all
labor and material, used or required by him in connection with the work contemplated by
said Contract, and fully reimburses the obligee for all outlay and expense which the
obligee may incur in making good any default of said Principal, then this obligation shall
be null and void; otherwise it shall remain in full force and effect.

A claimant is defined as one having a direct contract with the Principal or with a
Subcontractor of the Principal for labor, material or both, used or reasonably required for
use in the performance of the contract.

Signed and sealed this day of, 20 .. .

WITNESS:

SIGNATURES:

CONTRACTOR:

Signature.....

.....

Print Name Legibly

Print Name Legibly

SURETY:

Signature.....

.....

Print Name Legibly

Print Name Legibly

SURETY ADDRESS:

NAME OF LOCAL AGENCY:

.....

ADDRESS

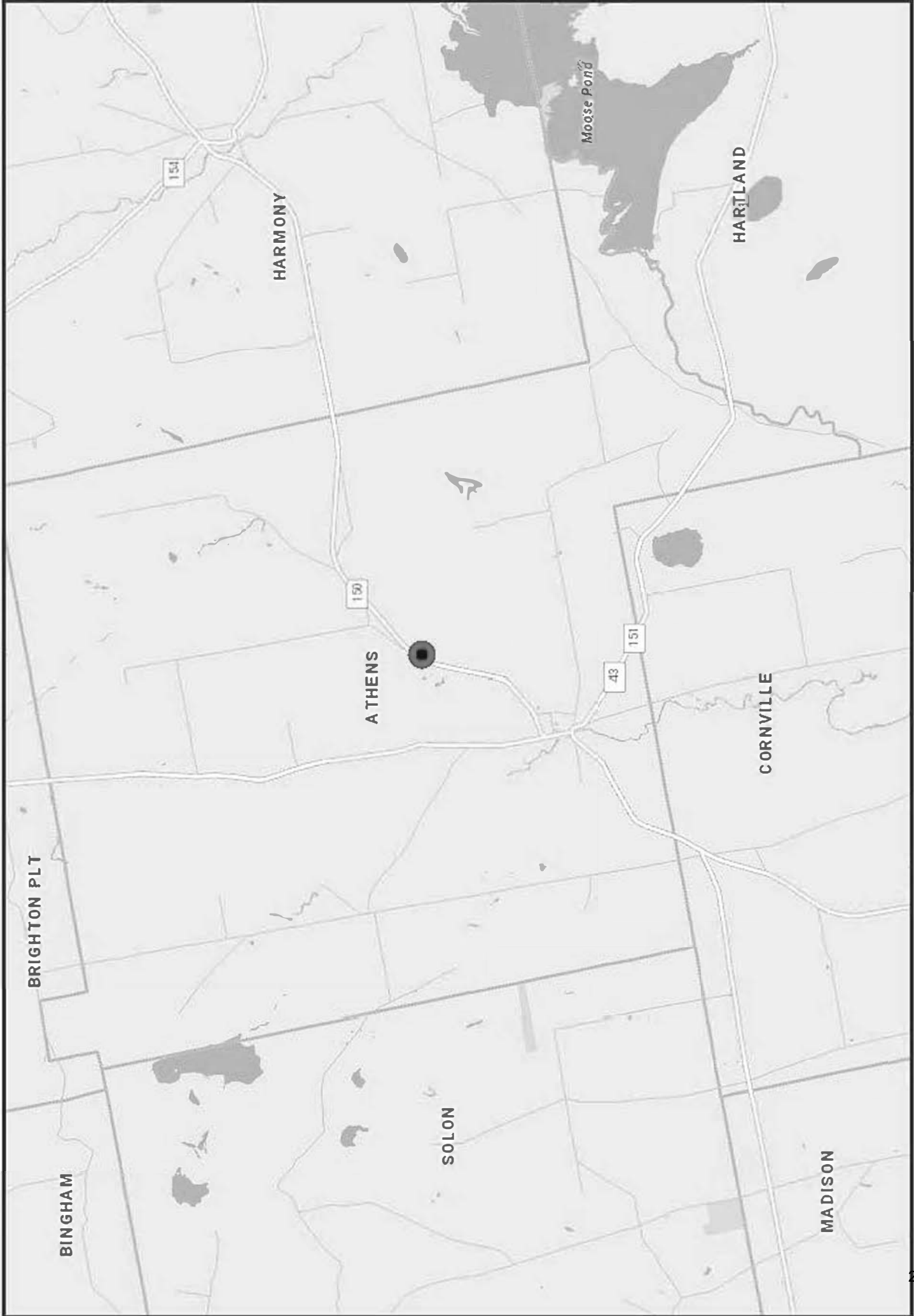
.....

.....

TELEPHONE

.....

ATHENS LOCATION MAP



The Maine Department of Transportation provides this publication for information only. Reliance upon this information is at user risk. It is subject to revision and may be incomplete depending upon changing conditions. The Department assumes no liability if injuries or damages result from this information. This map is not intended to support emergency dispatch.



Date: 2/26/2020
Time: 1:24:28 PM

GENERAL NOTES

1. All waste material not used on the project shall be disposed of in acceptable waste areas approved by the Department.
2. No separate payment will be made for superintendent or foreman for supervising the work. This will be considered incidental to the contract.
3. All work shall be done in accordance with the Maine Department of Transportation's Best Management Practices for Erosion Control & Sediment Control, February 2008. The Contractor shall be responsible for the Erosion and Sediment Control.
4. The Contractor is responsible for following dig safe requirements and for communicating with and coordinating with any applicable utilities. MaineDOT does not anticipate any utility work on this project. This does not relieve the Contractor of their responsibility.
5. "Undetermined Locations" shall be determined by the Department.
6. The Contractor shall be responsible for the payment for temporary electrical services or the use of a generator required to conduct their work.
7. The Contractor shall be responsible for portable toilets and drinking water for their crews, but may use on site water for concrete curing
8. MaineDOT may delete any portion of the work at any time without any extra compensation to the Contractor.
9. The Contractor shall meet onsite with representatives of the MaineDOT prior to commencing the work to discuss safety, traffic control, operations, quality of work, and any other topics that need discussing.
10. The Contractor will coordinate with MaineDOT throughout the duration of the project on schedule, issues, and MaineDOT's expectations.
11. Any damage caused to existing ditches, pavement or other MaineDOT property shall be repaired to the satisfaction of the Department at the Contractor's expense.
12. Areas on the project requiring fill will come from suitable sites such as excavation, ditch and inslope or equipment rental areas.

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 103
AWARD AND CONTRACTING
(Post-Bid, Pre-Award Qualifications)

Standard Specification Section 103.3 Post-Bid Qualification Delete the entire section and replace with the following:

After Bid Opening and as a condition for Award of the Contract, the lowest responsive bidder must either be prequalified for the Building Construction category by the Maine Department of Transportation or the Department may require an Apparent Successful Bidder that is not prequalified to demonstrate to the Department's satisfaction that the bidder is responsible, meets the Contractor Requirements set forth in this contract, and is qualified to perform the Work.

If such qualification is required, the Department will provide the Bidder with a written Notice of Post-Bid Qualifications requiring the Bidder to provide written documentation presenting evidence of qualifications.

Contractor Requirements

In order to be considered for the award of this contract, the Bidder and key employees that will be assigned to the Work in this Contract shall have successfully completed projects of similar size and scope and have sufficient experience in building construction. Said experience shall include, at a minimum, at least three (3) projects of equal or greater complexity than the work required by this Contract completed by the Bidder in the last five (5) years.

Areas of experience shall include, but are not limited to:

- Forming, placing, and finishing concrete.
- Wood framing.
- Electrical installation.
- Underdrain installation.
- Finish carpentry.
- Roofing.

The Contractor shall maintain current licenses, authorizations, ratings and registrations for the duration of the contract.

The Bidder shall be able to comply with the Contract Requirements, be able to deliver according to the contract schedule, and have a history of satisfactory performance.

The Bidder must have a current, applicable Safety Plan on file with the Department or must submit, prior to Contract award, an acceptable, current Safety Plan or Project and Site Specific Safety Plan to the Department which identifies and addresses job hazards of the expected contract work and complies with all applicable federal, State, and local laws governing safety including all applicable laws and regulations of Occupational Safety and Health Administration (OSHA).

The Bidder may be required to provide any information requested in the “Contractor’s Prequalification Application” form adopted by the Department.

Post-bid Qualification Submittals

The Department will notify the Apparent Successful Bidder of the requirements for post-bid, pre-award qualifications and the Bidder shall provide all of the items within seven (7) days of the notice. The Contractor shall submit two copies or an electronic copy of all required submittals to the Department.

The Bidder may be required to submit evidence of compliance with all Contractor Requirements set forth in this Contract.

If the Bidder does not have a history of satisfactory performance performing similar Work under contracts with the Department that meets the Contractor Requirements regarding experience, the Bidder may be required to submit written documentation setting forth the experience of the Bidder and subcontractor(s) who will be performing the Work specified in the contract documents, including a description of similar construction projects completed in the last five (5) years that highlight the Bidder’s and subcontractors’ related experience. Such information shall include:

1. the Company’s history and experience of work related specifically to the Scope of Work in this contract;
2. the name of the owner for whom the work was performed;
3. the name and telephone number of a contact person;
4. a description of the work performed by the Bidder or their subcontractor; and
5. the total construction cost of each project, and the value of work performed by the Bidder or their subcontractor.

If the Bidder does not have a history of satisfactory performance performing similar Work under contracts with the Department that meets the Contractor Requirements regarding experience, the Bidder may be required to submit written documentation setting forth the experience of the Bidder’s key personnel who will be performing the Work specified in the contract documents, including a description of similar work completed in the last five (5) years that highlight the Bidder’s and subcontractors’ related experience. Such information shall include:

1. the key personnel's experience and number of years performing work related specifically to the Scope of Work in this contract;
2. the name of the owner for whom the work was performed;
3. the name and telephone number of a contact person;
4. a description and value of the work performed by key personnel.

The Bidder may be required to submit the relevant experience of the key personnel and supervisors who will be performing Work under this contract, their experience and number of years performing work related specifically to the Scope of Work in this contract.

The Bidder's submittal may be required to include a statement describing the personnel and equipment available for the Work and demonstrating that the Bidder is able to deliver according to the contract schedule.

If a Bidder has not previously submitted a Soil Erosion and Water Pollution Control Plans (SEWPCP) for other Department projects, the Contractor must submit, prior to Contract award, a substantially complete, acceptable, project specific Soil Erosion and Water Pollution Control Plan.

If the Bidder is to provide any information requested in the "Contractor's Prequalification Application" form adopted by the Department, the Notice of Post-Bid Qualifications shall so state.

If a current, applicable copy of the Contractor's Safety Plan is not on file with the Department, the Contractor must submit, an acceptable, current Contractor's Safety Plan or Project and Site Specific Safety Plan to the Department in accordance with Special Provision Section 105 Safety Plan. The plan shall identify and addresses job hazards of the expected contract work and comply with all applicable federal, State, and local laws governing safety including all applicable laws and regulations of Occupational Safety and Health Administration (OSHA).

The Bidder may be required to provide its OSHA 300 Log and its Experience Modification Rate provided by applicable insurance carrier.

Upon receipt of the pre-award submittals, the Department will review the submissions and determine if the submitted evidence or information satisfies the Department requirement that the bidder is qualified to properly carry out the terms of the Contract.

The qualifications submitted will be checked for general conformance with the concept of the project and compliance with the requirements set out in the Contract Documents. This review does not modify the Contractor's duty to comply with the Contract documents.

Bidders shall ensure that all information required herein is submitted. Provision of inaccurate information or failure to provide all completed and required information may result in the Bidder being determined to be "Not Qualified" or disqualified as non-responsive. Within 14 days, the Department will review the required submittals for completeness, conformity with Federal and State requirements, Contract provisions, applicable laws and regulations of Occupational Safety and Health Administration (OSHA) and Department policy and procedures. The Department reserves the right to communicate in writing with Bidders, if needed, to obtain additions to and/or clarification of information contained in the submittals received. Review by the Department, comments by the Department, or any failure to review or comment, shall not absolve the Contractor of its responsibility to develop and implement the Contractor's Safety Plan or the Project and Site Specific Safety Plan or the SEWPCP in accordance with the Contract, or to shift any responsibility to the Department. The Bidder shall have 3 days to submit additions and clarifications. The Bidder will have no additional opportunity to submit or clarify information. The Department will not provide an opportunity for the Bidder to meet to present evidence.

A Bidder may be determined to be Qualified in accordance with this Special Provision, and still may need to make minor adjustments to the one or more of the plans submitted in order to meet specifications and/or address Department comments. The determination of qualified does absolve the Contractor of the responsibility to submit plans which comply with applicable specifications.

Based on these submissions, the Department will make one of the following determinations:

1. Qualified - The Contractor has satisfied the post-bid, pre-award qualification requirements and demonstrated to the Department's satisfaction that it is responsible, can meet the Contractor Requirements set forth in this contract, and is qualified to perform this type of work. The Contractor may still be required to make minor revisions to one or more of the plans submitted prior to starting on site work.
2. Not Qualified - Bidder is not qualified to properly carry out the terms of the Contract and/or the submission does not meet specifications and accepted standards and is not acceptable, as determined by the Department.

There is no Appeal process and the determination of "Not Qualified" is final. The Department will reject the bid as non-responsive, and the Award process will proceed without the unqualified Bidder.

The Department will notify the Bidder of its determination in writing. If a determination of "Not Qualified" is rendered, the notice will set forth reasons to the extent practical. Such reasons may include the following:

- A. Not meeting contract Contractor Requirements

- B. Insufficient experience
- C. No Safety Plan or Project and Site Specific Safety Plan or an unacceptable Safety Plan or Project and Site Specific Safety Plan
- D. Default(s) or termination(s) on past or current Contracts.
- E. Failure to pay or settle all bills for labor, Materials or services on past or current Contracts.
- F. Failure to provide Closeout Documentation on past or current Contracts.
- G. Failure to fulfill warranty obligations on past or current Contracts.
- H. Failure to comply with directives of the Department on past or current Contracts.
- I. "Below Standard" performance as determined from the Department's Contractor's Performance Rating process.
- J. Inability of the Contractor to obtain or retain performance or Payment Bonds meeting MDOT requirements.
- K. Failure to accept an Award of a Contract made by the Department to the Contractor.
- L. Making materially false, deceptive, or misleading Statements or omissions, whether or not under oath, regarding a claim on prior Contracts or on the Contractor's Prequalification Application or the Post-Bid Qualifications submittals.
- M. Failure to provide information requested by the Department pursuant to this Special Provision.
- N. Any of the reasons contained in Section 102.02 of the "Rules Regarding Debarment of Contractors", Maine Department of Transportation Register 17-229, Chapter 102 (October 2, 1985).
- O. Debarment or suspension by any federal, State, or local governmental procurement agency or the Contractor's Agreement to refrain from Bidding as part of the settlement with any such agencies.
- P. Other serious misconduct that the Department reasonably determines will substantially and adversely affect the cost, quality or timeliness of Work, or the safety of Workers or the public.

SPECIAL PROVISION
SECTION 104
GENERAL RIGHTS AND RESPONSIBILITIES
(Wage Rates)

104.3.8A. Federal Wage Rates and Labor Laws Delete the entire section 104.3.8A.

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
(Limitations of Operations)

1. A Preconstruction meeting must be held prior to any work being started.
2. The Contractor shall notify the Department 48 hours prior to any change in work schedule.
3. Inspections by MaineDOT will be done at key points to be determined by the Department. The Contractor shall plan operations so that the Department will have sufficient advance notification of daily work schedules to provide the necessary inspection and testing. Sufficient notification will be considered 48 hours, unless otherwise agreed by the Department.

SPECIAL PROVISION
SECTION 105
GENERAL SCOPE OF WORK
(Safety Plan)

In order to be awarded a construction contract, the Bidder must have a current, applicable Safety Plan on file with the Department or must submit to the Department's Bureau of Maintenance & Operations, an acceptable, current Contractor's Safety Plan or Project and Site Specific Safety Plan to the Department which identifies and addresses job hazards of the expected contract work and complies with all applicable federal, State, and local laws governing safety including all applicable laws and regulations of Occupational Safety and Health Administration (OSHA).

The Bidder's Project and Site Specific Safety Plan shall address the specific activities or tasks that require protection and establish the procedures that are to be followed to minimize the hazard. Specific statements which describe both what action is to be taken and how it is to be performed are preferable. The plan shall address the following items which include, but are not limited to:

1. Personal Protective Equipment
2. Materials Handling - Cranes and Rigging
3. Vehicular Access to the Work Zone
4. Work Zone Safety and Traffic Control
5. Fall Prevention/Fall Protection
6. Scaffolding/Ladders/Aerial Lifts
7. Electrical
8. Lock Out Tag Out
9. Confined Space
10. Hazard Communication
11. Excavation/Trenching
12. Hand Tool Safety
13. Welding & Cutting
14. Fire Prevention and Protection
15. Emergency Action Plans and Response
16. Housekeeping

The Bidders may submit the Contractors Safety Plan or the Project and Site Specific Safety Plan with the bid or the Apparent Low Bidder shall submit the Contractor's Safety Plan or the Project and Site Specific Safety Plan within 72 hours of bid opening or notification that the Apparent Low Bidder changed or the Department will reject the bid as non-responsive.

The Contractor shall submit two copies or an electronic copy of the Safety Plan to the Department.

Within 14 days, the Department will review the Apparent Low Bidder's Safety Plan. The Department will review a Project and Site Specific Safety Plan to evaluate if the Bidder has a reasonable understanding of job hazards of the expected contract work, has determined preventive measures to overcome these hazards and understands that the work is to be conducted in compliance with this special provision, Contract requirements and all applicable Federal, State, and local laws governing safety including all applicable laws and regulations of OSHA. The Department reserves the right to communicate in writing with Bidders, if needed, to obtain additions to and/or clarification of information contained in the submittals received. No review or comment by the Department, or any failure to review or comment, shall absolve the Contractor of its responsibility to develop and implement a Safety Plan in accordance with the Contract, or to shift any responsibility to the Department. The Bidder shall have 3 days to submit additions, changes and clarifications. The Bidder will have no additional opportunity to submit, modify or clarify information. The Department will not provide an opportunity for the Bidder to meet.

Based on these submissions, the Department will make one of the following determinations:

1. Qualified - The Contractor has satisfied the post-bid, pre-award Safety Plan requirements.
2. Not Qualified - Bidder is not qualified to properly carry out the terms of the Contract and/or the submission does not meet specifications and accepted standards and is not acceptable, as determined by the Department.

There is no Appeal process and the determination of "Not Qualified" is final. The Department will reject the bid as non-responsive, and the Award process will proceed without the unqualified Bidder.

Failure by the Contractor to perform the Work in compliance with their submitted Safety Plan, Federal and State requirements, Contract provisions, applicable laws and regulations of OSHA when required or to substantially meet other contractual requirements will be considered a violation and may result in the following actions:

All Incidents: The Contractor will immediately eliminate all unsafe conditions brought to the Contractor's attention by the Department or any other representative of the Department. The Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item.

1st Incident: If the Contractor has previously received a verbal warning for the same or similar unsafe conditions or does not take corrective action immediately upon receipt of verbal warning, the Department will issue a written warning.

2nd Incident: The Department may (A) give written Notice of Default to the Contractor and immediately terminate the Contract by written Notice of Termination, or (B) take prosecution of the Work away from the Contractor without violating the Contract. Such Contractor will be prohibited from submitting a Bid for the Work in the event that the Work is re-advertised. Further, the Department may refuse to accept any Bid from the Contractor on any Project for a period of two years from the date of such refusal. The Department may then take any action that the Department determines is in the best interest of the Department including re-advertising the Work.

SPECIAL PROVISION
SECTION 107
TIME
(Contract Time)

1. The Contractor shall be allowed to commence work on the Contract on or after, May 4, 2020 provided that the Contract has been awarded, all required plans/submittals have been received and determined to be acceptable by the Department and a preconstruction meeting has been held.
2. The specified Contract Completion Date is September 4, 2020. All work must be completed by the Contract Completion Date specified in the Contract, and any authorized extensions.
3. Once the Contractor begins physical work, they shall have 90 calendar days to complete the work. For every Calendar day above and beyond the 90 calendar days the work is not complete, the Contractor will be assessed Supplemental Liquidated Damages at the rates given in Section 107.7.2 of the Standard Specifications.
4. Once operations commence, the Contractor shall continue work on the project until physical work is complete. For every weekday not worked, the Contractor will be assessed Supplemental Liquidated Damages at the rates given for liquidated damages in Section 107.7.2 of the Standard Specifications; excluding days lost to inclement weather, holidays, and approved absences.
5. Work can be performed at any time except Sundays, Holidays and as provided in Special Provision, Section 107, Contract Time. Requests to work Saturday must be made by noon time on Thursday.
6. 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. Completion occurs when the Contractor has finished all Work pursuant to the Contract, the Work is complete and has undergone a successful final inspection and delivered documentation is complete and accepted. Completion does not mean substantial Completion.

SPECIAL PROVISION
SECTION 502
STRUCTURAL CONCRETE
(Cast-in-Place Concrete)

PART 1 – GENERAL

1.1 Summary

This work shall consist of furnishing and constructing all cast-in-place Portland Cement Concrete as shown on the contract drawings and as required to complete the work. This work includes all steel reinforcement, form work, anchor bolts, sleeves and any other accessories necessary to complete the work. All concrete mixes must be batched and designed in accordance with this specification and the approved design.

1.2 References

All work shall comply with the applicable provisions of the following codes:

- A. American Concrete Institute ACI-318-08 “Building Code Requirements for Structural Concrete and Commentary”
- B. American Concrete Institute ACI-301-10 “Specifications for Structural Concrete”.
- C. Concrete-Reinforcing Steel Institute CRSI Handbook, 10th Edition.
- D. ASTM C94 Standard Specification for Ready-Mixed Concrete.

1.3 Submittals

At least 30 days prior to the first placement, a concrete mix design shall be submitted by the contractor to the Department for approval. No concrete shall be placed on the project until the concrete mix design has been approved by the Department. The mix design submitted by the contractor to the Department shall include the following information:

- A. Description of individual coarse aggregate stockpiles, original source, bulk specific gravity, absorption and gradation. A combined coarse aggregate blended gradation shall be provided.
- B. Description of fine aggregate, original source, bulk specific gravity, absorption, colorimetric, gradation, and Fineness Modulus (F.M.).
- C. Description and amount of cement.
- D. Target water-cement ration.
- E. Target water content by volume.
- F. Target strength.
- G. Target air content, slump and concrete temperature
- H. Target concrete unit weight.
- I. Type and dosages of air entraining and chemical admixtures.

Approval by the Department will be contingent upon the ability of the mix design proportions to produce the concrete strength requirement and other factors that may affect durability.

The Contractor shall provide the Department with at least two copies of shop drawing for all reinforcing steel and other accessories to be cast-in-place. Shop drawings shall be submitted at least 30 days in advance of concrete placement and shall be reviewed by the Department prior to placement.

1.4 Testing

Concrete acceptance testing will be performed by the Department. The Department will determine the acceptability of the concrete through a quality assurance program. Quality assurance tests will include compressive strength and air content. Concrete sampling for quality assurance tests will be taken at the discharge end of the pump line.

Compressive strength tests will be completed by the Department in accordance with AASHTO T22 at 28 days, except that no slump will be taken. The test average of two concrete cylinders will determine the compressive strength.

Testing for entrained air in concrete shall be in accordance with AASHTO T152.

Concrete not meeting the standards implied in these specifications or as indicated on the Plans shall be removed and replaced by the Contractor and no cost to the Department.

1.5 Quality Assurance

Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment. Measuring and batching of materials shall be performed at a Department approved batching plant.

Determination of the concrete cover over reinforcing steel for structural concrete shall be made prior to concrete being placed in the forms. Bar supports, chairs, slab bolsters, and side form spacers shall meet the requirements of CRSI Chapter 3, Section 2.5 Class 1, Section 2.6 Class 1A or Section 4. All supports shall meet the requirements for type and spacing as stated in the CRSI Manual of Standard Practice, Chapter 3. Concrete will not be placed until the placing of the reinforcing steel and supports have been approved by the Department. If the Contractor fails to secure Department approval prior to placement, the Contractor's failure shall be cause for removal and replacement at the Contractor's expense.

The Contractor shall notify the Department at least 48 hours prior to the placement, when reinforcing steel will be ready for checking. Sufficient time must be allowed for the checking process and any needed repairs.

PART 2 – PRODUCTS

2.1 Concrete

A. Materials

Materials shall meet the requirements specified in the following sections of Division 700 Materials of the “State of Maine, Department of Transportation, Standard Specifications, Revision of November 2014.”

1. Portland Cement and Portland Pozzolan Cement	701.01
2. Water	701.02
3. Air Entraining Admixtures	701.03
4. Water Reducing Admixture	701.04
5. Water Reducing, High Range Admixture	701.0401
6. Set Retarding Admixtures	701.05
7. Curing Materials	701.06
8. Water Stops	701.07
9. Smoothed Surface Asphalt Roll Roofing (Formerly	701.08
10. Heavy Roofing Felt)	
11. Fly Ash	701.10
12. Calcium Nitrate Solution	701.11
13. Silica Fume	701.12
14. Ground Granulated Blast Furnace Slag	701.13
15. Fine Aggregate for Concrete	703.01
16. Course Aggregate for Concrete	703.02
17. Alkali Silica Reactive Aggregates	703.0201
18. Preformed Expansion Joint Filler	705.01

B. Cement

Cement shall be Portland cement conforming to ASTM C-150 for type I, II or III as specified.

C. Aggregates

1. Concrete aggregate shall conform to ASTM Specification C-33. All aggregates shall be free from frozen materials and other impurities.
2. Fine aggregates shall be clean sand free from clay, loam and other deleterious substances.
3. Coarse aggregate shall be durable, clean, crushed stone or gravel, free from clay, loam and other deleterious substances.

D. Water

Water shall be clean and potable containing no deleterious impurities which may be harmful to concrete or accessories.

E. Admixtures

Prohibited admixture: Calcium chloride, thiocyanates or admixture containing more than 0.05% chloride ions are not permitted.

All admixtures products shall be listed on the MaineDOT Qualified Products List. (<https://www.maine.gov/mdot/research/products/>) Certification: Written conformance to the above mentioned requirements and the chloride ion content of the admixture will be required from the admixture manufacturer prior to mix design review by the Department.

2.2 Steel

Reinforcing steel shall conform to ASTM A-615 and be of an approved manufacturer. All bars shall be new, Grade 60 and shall be at the sizes shown on the drawings.

All reinforcing steel shall meet the requirements of Reinforcing Steel, Section 709.01 of the State of Maine, Department of Transportation, Standard Specifications.

Steel accessories shall be at the sizes and types as shown on the Drawings unless otherwise specified and shall include all spacers, chairs, ties and other devices for properly spacing, supporting and fastening reinforcement in place. Anchor bolts shall be F1554, Grade 36 or better and of the sizes and types shown on the Drawings.

2.3 Accessories

Non-shrink Grout shall be listed on the MaineDOT Qualified Products List (<https://www.maine.gov/mdot/research/products/>)

2.4 Joint Sealants

Joint filler shall be listed on the MaineDOT Qualified Products List

(<https://www.maine.gov/mdot/research/products/>)

PART 3 – EXECUTION

3.1 Concrete Proportioning

Concrete shall conform to the following requirements:

Min. Strength 28 Day- psi	Max. Size Coarse Agg.	% Air (1%)	Min-Max Slump	Min Chem. Fac.	Max W/C
4000	¾	5-7.5*	2-4**	611 #/CY	0.45

*Target Air is 6% with-1% ; + 1.5% Range

**Min-Max slump is before the addition of water reducing admixtures.

Coarse aggregate for concrete shall meet the requirements of Section 703.02 for Class “A” or “AA”.

3.2 Formwork

All construction form work shall be of sufficient strength and construction to safely withstand the loads imposed, conforming to ACI 347. Forms shall be suitably tied and/or bolted together to maintain the specified dimensions. All exposed corners shall have 3/4 inch chamfer strips unless otherwise specified. Forms shall be built to conform to the dimensions, location, contours and details shown on the Plans. The faces of forms against which the concrete is to be placed shall be dressed smooth and uniform and shall be free from winds, twists, buckles and other irregularities.

Materials – Forms shall be smooth, treated plywood or steel. Plywood forms shall be coated with form oil and steel forms shall be coated with water or other approved substances to facilitate removal. Only non-staining substances shall be used.

All foreign matter within the forms shall be removed before depositing concrete in them.

All forms shall be inspected and approved by the Department prior to placing any concrete within them.

Build into the forms all collars or sleeves required for piping and wiring, and any anchors and inserts as shown on the Drawings.

Forms shall be left in place until the concrete has developed 80 percent of the design strength, and proven by a break of two cylinders. The formwork may be removed 48 hours after the completion of the concrete placement with the approval of the Department and when the following conditions are met:

- A. Immediately after the forms are removed, defects in the concrete surface shall be repaired in accordance with section 502.13 of the “State of Maine, Department of Transportation, Standard Specifications, Revision of November 2014” and the repaired area is thoroughly dampened with water. The surfaces of exposed concrete shall be cured for the remainder of the 7-day curing period by the application of a product listed on the Maine Department of Transportation Prequalified list of curing compounds. The curing compound shall be applied continuously by an approved pressure spraying or distributing equipment at a rate necessary to obtain an even, continuous membrane, meeting the manufacturer’s recommendation but at a rate of not less than 1 gal/200ft² of surface. Other methods of curing concrete may be used with the prior approval of the Department.
- B. Forms and false work, including blocks and bracing, shall not be removed without the consent of the Department. The Department’s consent shall not relieve the Contractor of responsibility for the safety of the work. In no case shall any portion of the wood forms be left in the concrete. As the forms are removed, all projection metal devices that have been used for holding the forms in place shall be removed in accordance with Section 502.10 and the holes shall be filled as required in Section 502.13 of the “State of Maine, Department of Transportation, Standard Specifications, Revision of November 2014”.

Forms shall be removed so as not to damage the concrete.

3.3 Placing Concrete

Placing of all concrete shall be done in accordance with Section 502.11 of the “State of Maine, Department of Transportation, Standard Specifications, Revision of November 2014”.

All concrete shall be placed before it has taken its initial set, in any case, as specified in Section 502.11. Concrete shall be placed in horizontal layers in such a manner as to avoid separation and segregation. A sufficient number of workers for the proper handling, tamping and operation of vibrators shall be provided to compact each layer before the succeeding layer is placed and to prevent the formation of cold joints between layers. Care shall be taken to prevent mortar from spattering on structural steel, reinforcing steel and forms. Any concrete or mortar that becomes dried on structural steel, reinforcing steel or forms shall be thoroughly cleaned off before the final covering with concrete. Following the placing of the concrete, all exposed surfaces shall be thoroughly a cleaned as required, with care not to injure any surfaces.

Concrete in any section of a structure shall be placed in approximately horizontal layers of such thickness that the entire surface shall be covered by a succeeding layer before the underlying layer has taken its initial set. Layers shall not exceed 18 inches in thickness and shall be compacted to become an integral part of the layer below. Should the placement be unavoidably delayed long enough to allow the underlying layer to take initial set or produce a so-called “cold joint”, the following steps shall be taken:

- A. An incomplete horizontal layer shall be bulk-headed off to produce a vertical joint
- B. Horizontal joints shall be treated as required in Section 502.11(f) of the “State of Maine, Department of Transportation, Standard Specifications, Revision of November 2014”.
- C. Portland Cement concreted with a high range, water reducing admixture shall not be placed when the concrete mix temperature is below 5° or above 85°.
- D. Fresh concrete, threatened with rain damage shall be protected by approved means. Sufficient material for covering the work expected to be done in one day shall be on hand at all times for emergency use. The covering shall be supported above the surface of the concrete.

Concrete mixed in transit mixers shall be placed within 90 minutes of addition of water at the plant. Delivery tickets shall state the time of water addition of water at the plant. Delivery tickets shall state the time of water addition or departure from the plant if this is within 10 minutes. If the concrete cannot be placed within the specified time limitations, the Department may require that all cement be added at the job site. No additional water shall be added without consulting the Department. Any additional water added to the concrete on the site is the Contractor’s sole responsibility and risk. The Contractor shall provide a Certificate of Compliance for each truckload of concrete to the Department at the time of the load placement. The Certificate of Compliance shall be a form acceptable to the Department and shall include the following:

- A. Contract Name & Number
- B. Facility/Building Name
- C. Manufacturing Plant (Batching Facility)
- D. Name of Contractor (Prime Contractor)
- E. Date
- F. Time Batched/Time Discharged
- G. Truck No.
- H. Quantity (Quantity Batched this Load)
- I. Type of concrete by Class and Producer Design Mix No.
- J. Cement Brand or Type, and Shipment Certification No.
- K. Temperature of Concrete at Discharge
- L. Target Weights per cubic yard and Actual Batched Weights for:
 - 1. Cement
 - 2. Course Concrete Aggregate
 - 3. Fine Concrete Aggregate
 - 4. Water (including free moisture in aggregates and water added at the project)
 - 5. Admixtures Brand and Quantity (fluid ounces/cubic yard)
- M. Air Entraining Admixture
- N. Water reducing admixtures
- O. Other admixtures
- P. Placement Location

Power vibrators shall be provided to thoroughly consolidate and compact the concrete. Vibrators shall not be used to push or move concrete laterally in forms. Excessive vibration will not be permitted. A minimum of two (2) power vibrators shall be on the site when pouring the concrete. Vibrators shall be an approved type, with a frequency of 5,000 to 10,000 cycles per minute and shall be visibly capable of properly consolidating the designed mixture. Sufficient vibrators shall be used to consolidate the incoming concrete within 5 minutes after placing.

A float finish for horizontal surfaces shall be achieved by placing an excess of concrete in the form and removing or striking off the excess with a template or screed, forcing the coarse aggregate below the surface. Creation of concave surfaces shall be avoided. After the concrete has been struck off, the surface shall be thoroughly floated to the finished grade with a suitable floating tool. Aluminum and steel floats are not allowed. Float finish, unless otherwise required, shall be given to all horizontal surfaces. The rate of placing concrete shall be limited to that which can be finished without undue delay and shall not be placed more than 10 ft ahead of strike-off. Neat cement paste, dry cement powder or the use of mortar for topping or plastering of concrete surfaces will not be permitted.

Lightweight, vibrating screeds shall be used on slab structures and shall have the following features:

- A. It shall be portable and easily moved, relocated, or adjusted by no more than four persons.
- B. The power unit shall be operable without disturbing the screeded concrete.
- C. It shall be self-propelled with controls that will allow a uniform rate of travel and by which the rate of travel can be increased, decreased or stopped.
- D. It shall have controlled, uniform, variable frequency vibration, end to end.
- E. It shall be fully adjustable for flats, crowns, or valleys.
- F. The screed length shall be adjustable to accommodate the available work area.

When a lightweight vibrating screed is utilized, the concrete shall be placed or cut to no more than ½ in above the finished grade in front of the front screed. The screed shall be operated such that at least 3 ft of concrete is in position in front of the screed.

The texturing of concrete surfaces shall be applied as approved by the Resident. The surface tolerance and texture shall be acceptable to the Resident, or the placement may be suspended until remedial action has been taken. The Resident may order the removal and replacement of material damaged by rainfall.

Immediately after screeding, floating and texturing, the surface of the concrete shall be tested for trueness, by the Contractor, with a 10 ft straightedge and all irregularities corrected at once in order to provide a final surface within the tolerance required. The surface shall be checked both transversely and longitudinally.

Any area that requires finishing to correct surface irregularities shall be retextured. After the concrete has cured the surface may be tested with a 10 ft straightedge or a lightweight profiler. The maximum deviation of surface in inches below 10 foot straightedge is 1/8inch.

3.4 Protection and Curing of Concrete

All concrete shall be placed /protected in accordance with Section 502.08 Cold Weather Concrete of the “State of Maine, Department of Transportation, Standard Specifications, Revision of November 2014”.

Fresh concrete shall be protected from rain, cold and excessive temperature. Concrete shall be placed at atmospheric temperatures between 40°F and 90°F unless authorized by the Department.

Concrete shall not be placed against frozen surfaces. All frost, ice, and snow shall be removed from all material that will be in contact with fresh concrete. Unless authorized by the Resident, the mixing and placing of concrete shall be discontinued when the atmospheric temperature is below 40°F in the shade and dropping and shall not be resumed until the atmospheric temperature is as high as 35°F in the shade and rising. If authorization is granted for the mixing and placing of concrete under atmospheric conditions different from those specified above, the water shall be heated to a temperature not exceeding 180°F. When either the aggregate or water is heated to above 120°F, they are to be combined first in the mixer before the cement is added. If the atmospheric temperature is below 25°F, the aggregate shall also be heated when directed by the Resident. Materials containing frost or lumps of frozen material shall not be used. Stockpiled aggregates may be heated by the use of dry heat or steam. Aggregates shall not be heated directly by gas or oil flame or on sheet metal over a fire. When aggregates are heated in bins, steam coil or water coil heating or other methods that will not be detrimental to the aggregates may be used. The heating apparatus shall be capable of heating the mass uniformly and preventing the occurrence of spots of overheated material. The temperature of the mixed concrete shall be between 55°F and 70°F when it is placed in the forms. Salt or other chemicals shall not be added to the concrete for any reason whatsoever, except by written permission of the Resident. Contractor shall be wholly responsible for the protection of concrete during cold weather operations and any concrete injured by frost action or overheating shall be removed and replaced at the Contractor's expense.

All concrete and its surfaces shall be kept above 50°F for the first four (4) days of the curing period and above 32°F for the remainder of the period. In the 24 hours following the end of the curing period, the temperature of the concrete shall be decreased on a gradual basis, not to exceed a total change of 40°F.

All concrete surfaces, if not protected by forms, shall be kept thoroughly wet either by sprinkling or by the use of wet burlap, cotton mats or other suitable fabric with clean fresh water for a curing period at least 7 days after placing of concrete or until the end of the curing period.

Polyethylene sheets shall not be placed directly on the concrete, but may be placed over the fabric cover to prevent drying except as provided in 3.2 Formwork, Section F.

All slabs and wearing surfaces shall be water cured only and kept continuously wet for the entire approved curing period by covering with one of the following systems:

- A. 2 layers of wet burlap,
- B. 2 layers of wet cotton mats,
- C. 1 layer of wet burlap and either a polyethylene sheet or a polyethylene coated burlap blanket,
- D. 1 layer of wet cotton mats and either a polyethylene sheet or a polyethylene coated burlap blanket.

The first layer of either the burlap or the cotton mats shall be wet and shall be applied as soon as it is possible to do so without damaging the concrete surface. Polyethylene sheets shall not be placed directly on the concrete, but may be placed over the fabric cover to prevent drying.

3.5 Finishing

- A. Exposed Concrete
 - 1. After the removal of forms, remove all form ties to at least 1 inch below surfaces. Remove all loose and honeycombed concrete, fins and other surface irregularities.
 - 2. Concrete patching – After cleaning out all holes, honeycombs and other areas to be patched, moisten surface and apply non-shrink grout or a mixture of one part Portland Cement and 3 parts sand, taking care to match the concrete.
 - 3. All concrete which will be exposed to view, shall be hand rubbed using carborundum bricks, burlap or other approved method. Finished surfaces should present a smooth, even appearance of uniform color.
- B. Unexposed Concrete
 - 1. All unexposed concrete shall have tie holes, honeycombs and other holes filled with patching mortar as above. Fins and other irregularities shall be removed so as to present a uniform surface.
 - 2. Unexposed concrete will not require a rubbed finish after patching.
- C. Penetrations – All wall or floor penetrations by pipes, conduit and other inserts shall be sealed with non-shrink grout around entire penetration to provide a watertight finish.

SPECIAL PROVISION
SECTION 503
REINFORCING STEEL

Description This work shall consist of furnishing and placing of reinforcement in accordance with these specifications and in conformance with the Plans, Supplemental Specifications and Special Provisions.

Materials Materials shall meet the requirements of the following State of Maine Standard Specifications Sections of Division 700-Materials.

Reinforcing Steel	709.01
Welded Steel Wire Fabric	709.02

Schedule of Material When the Department does not furnish reinforcing steel schedules, the Contractor shall submit order lists, bending diagrams and bar layout drawings to the Resident for approval. The reinforcing steel shall not be ordered until these lists and drawings are approved. Approval shall not relieve the Contractor of full responsibility for the satisfactory completion of this item. When the Department allows the use of precast concrete deck panels, or any other significant changes that effect the quantity of reinforcing steel, the Contractor shall be responsible for revising the reinforcing steel schedule; the revised schedule shall be submitted to the Resident for approval.

Protection of Material Reinforcement shall be stored on skids or other supports a minimum of 12 in above the ground surface and protected at all times from damage and surface contamination. The storage supports shall be constructed of wood, or other material that will not damage the surface of the reinforcement or epoxy coating. Bundles of bars shall be stored on supports in a single layer. Each bundle shall be placed on the supports in a single layer. Each bundle shall be placed on the supports out of contact with adjacent bundles.

If it is expected that epoxy-coated bars will be required to be stored outdoors for a period in excess of three months, then they shall be protected from ultraviolet radiation.

Fabrication Bending of reinforcing bars and tolerances for bending of reinforcing bars shall be in conformance with the latest edition of "Manual of Standard Practice of the Concrete Reinforcing Steel Institute" and the "Detailing Manual of the American Concrete Institute". Unless otherwise specifically authorized, bars shall be bent cold.

Placing and Fastening All steel reinforcement shall be accurately placed in the positions shown on the plans and shall be firmly held there during the placing and setting of the concrete. Immediately before placing concrete, steel reinforcement shall be free from all foreign material, which could decrease the bond between the steel and concrete. Such foreign material shall include, but not be limited to, dirt, loose mill scale, excessive rust, paint, oil, bitumen and dried concrete mortar.

Bars shall be fastened together at all intersections except where spacing is less than 1 ft. in either direction, in which case, fastening at alternate intersections of each bar with other bars will be permitted providing this will hold all the bars securely in position. This fastening may be tightly twisted wire. Welding on epoxy-coated reinforcing steel will not be permitted under any condition.

Proper distances from the forms shall be maintained by means of stays, blocks, ties, hangers or other approved means. Blocks used for this purpose shall be precast Portland cement mortar blocks of approved shape and dimensions. Chairs may be used for this purpose and, when used, must be plastic, plastic coated, epoxy coated or plastic tipped. Layers of bars may be separated by precast Portland cement mortar blocks or other approved devices. The use of pebbles, pieces of broken stone or brick, metal pipe or wooden blocks shall not be permitted. The placing of reinforcement as concrete placement progresses, without definite and secure means of holding the steel in its correct position, shall not be permitted except in the case of welded steel wire fabric or bar mats.

Epoxy-coated reinforcing bars supported on formwork shall rest on coated wire bar supports, or on bar supports mad of dielectric material or other acceptable materials. Wire bar supports shall be coated with dielectric material for a minimum distance of 2 from the point of contact with the reinforcing bars. Reinforcing bars used as support bars shall be epoxy-coated. In walls, spreader bars shall be epoxy-coated.

Tie wire for epoxy-coated reinforcing steel shall be soft annealed wire that has been nylon, epoxy or plastic coated.

Field bending or cutting of epoxy-coated reinforcing bars will not be allowed, unless otherwise indicated on the plans or permitted by the Resident. When field bending or cutting is allowed, all damaged coating areas shall be repaired in accordance with the patching requirements.

Bars in the foundation walls shall be placed so as to clear anchor bolts.

When specified on the contract plans, reinforcing steel shall be anchored into drilled holes.

The anchoring material shall be one of the products listed on the Maine Department of Transportation's list of Prequalified Type 3 Anchoring Materials. Installation shall be in accordance with the manufacturer's published recommendations.

At each anchor location, existing reinforcing will be located to avoid drilling through existing bars. Where interferences are found to exist, location adjustments will be determined by the Resident.

Minimum embedment lengths of reinforcing bars shall comply with the manufacturer’s published recommendations for the anchoring material selected. These embedment lengths shall be verified by the Resident before installation of the reinforcing bars. The reinforcing steel lengths indicated on the Plans may be reduced, at the Contractor’s option, to the determined minimum embedment lengths.

Reinforcement shall be inspected and approved by the Resident before any concrete is placed.

Splicing Reinforcing bars shall be spliced in accordance with the requirements of this section, and in the locations shown on the plans. No modifications of, or additions to, the splice arrangements shown on the plans shall be made without the Resident’s prior approval. Any additional splices authorized shall be staggered as much as possible. All splices shall be made in a manner that will ensure that not less than 75% of the minimum clear distance to other bars will be maintained, as compared to the cover and clear distance requirements for the unspliced bar.

Lapped splices shall be made by placing the bars in contact and wiring them together. Splice laps shall be made in accordance with the following table, unless otherwise noted on the plans.

Minimum Lap Splice Length (inches) ¹									
Bar Type	Bar Size								
	#3	#4	#5	#6	#7	#8	#9	#10	#11
Plain	14	18	22	26	33	43	54	68	83
Epoxy Coated	21	27	33	39	50	64	80	103	124

¹ Lap Splice lengths are based on the following parameters: Minimum center to-center spacing between bars of 6 in; nominal yield strength of the reinforcing steel of 60 ksi; minimum 28 –day compression strength of concrete of 4350 psi. When any of the preceding parameters is altered, appropriate minimum lap slice lengths will be determined by the Resident. When lap splices are placed horizontally in an element where the concrete depth below the splice will be 12 in, or more, the indicated lap splice lengths shall be multiplied by a factor of 1.4.

Mechanical couplers may be used for splicing reinforcing bars, provided they are approved by the Resident and conform to the following requirements:

- a. Tension Couplers- Couplers shall be able to develop 1.25 times the theoretical yield strength of the spliced bar in tension. Bolted and wedge-lock type couplers will not be allowed.
- b. Compression Couplers- Coupler shall be capable of maintaining the splice bars in alignment prior to and during concrete placement. For reinforcing bars designed to act in compression, the individual bar ends shall be within 1½° of being “square” to the final 12

in of the bar. Additionally, abutting bar ends shall be in contact, and the angle of the gap between abutting bar ends shall be 3°, or less.

- c. Mechanical Couplers Any mechanical couplers using a threaded splicer and dowel in combination, requiring a lapped splice with the reinforcing bars, shall have a minimum lap splice length as required by this Section. Welded splices may be made by the “Thermit” process or, with the approval of the Resident, by the shielded metal arc welding process or the self-shielded flux-core arc welding process. The latter two processes shall be used in strict conformation with the requirements of the latest edition of AWS D1.4 “Structural Welding Code – Welding Reinforcing Steel” and any applicable provisions of Section 504, Structural Steel. The Contractor shall submit complete details of their proposed method of making welded splices for the Resident’s approval.

Lapping Sections of welded steel wire fabric shall securely fasten to adjoining sections and overlap. All laps shall be in accordance with Wire Reinforcement Institute Manual of Standard Practice.

Bar mats shall be spliced as required for the individual bars.

Substitution Substitution of different size bars shall not be permitted except with the written authorization of the Resident.

SPECIAL PROVISION
SECTION 656
Temporary Soil Erosion and Water Pollution Control

Standard Specification, Section 656.1 and 656.2 are deleted. All applicable Sections of Standard Specification 656 will remain in effect for this Contract.

The information and requirements set forth in this Special Provision will constitute the Soil Erosion and Water Pollution Control Plan (SEWPCP) for this Project. Any costs associated with this Special Provision will be considered incidental to the Contract.

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/env/documents/bmp/BMP2008full.pdf>

The soil erosion and water pollution control measures associated with this Work are as follows:

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 the end of the working day.
4. Winter stabilization BMPs shall be applied in accordance with the MaineDOT BMP Manual between November 1 and April 15 or during frozen ground conditions.
5. Where necessary, catch basins and drainage inlets shall utilize Storm Drain Inlet Protection in accordance with the MaineDOT BMP Manual.
6. 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 from the Contractor. At a minimum, the SPCCP shall include:

**SPECIAL PROVISION
SECTION 656**

Temporary Soil Erosion and Water Pollution Control

- The name and emergency response numbers (telephone number, cellular phone and pager numbers, if applicable) of the Contractor's representative responsible for spill prevention and response;
 - General description and location of (1) handling, transfer, storage, and containment facilities of such products or hazardous Matter/Substances ("activities and facilities") and (2) potential receptors of such products or hazardous Matter/Substance including oceans, lakes, ponds, rivers, streams, wetlands, and sand and gravel aquifers ("sensitive resources") including potential conveyances (adjacent open and closed drainage systems), 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 containment and diversionary structures, inspections and personnel training;
 - 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, Maine DEP Spill Response, the National Response Center (if spill enters the water), the Resident, and local police and fire authorities, a list of emergency response equipment and locations and description of the capabilities of the equipment, a description of the general response and clean up protocols by product or Matter/Substances and an overview of the verbal and written notification procedures for federal, state and local officials. For a related provision, see *Standard Specification, Section, 105.2.3 - Project Specific Emergency Planning*.
7. The Environmental Coordinator must inspect and maintain, daily, all controls for the duration of the project.
 8. If the Project Resident directs additional soil disturbance that requires temporary erosion and sedimentation control measures included within this Special Provision, all additional Work will be paid for as Changes Permitted.
 9. If the Project Resident directs additional soil disturbance that requires temporary erosion and Sedimentation control measures not included within this Special Provision, Standard Specification, Section 656.1 will be reinstated and the Contractor shall prepare and submit a SEWPCP and properly implement its approved SEWPCP. All associate costs will be paid for as Extra Work. Any applicable permits shall be obtained by MaineDOT.

SPECIAL PROVISION
SECTION 815
Buildings

Description. The work shall consist of the furnishing and construction of the Salt Shed building at the Maine Department of Transportation Lot located at 177 Harmony Road, Athens, Maine in accordance with these contract documents.

Materials. All backfill, not otherwise specified, shall be Granular Borrow and shall meet the requirements of Section 703.19 Granular Borrow.

Aggregate Subbase shall meet the requirements of Standard Specification, Section 703.06 Aggregate for Base and Subbase – Grading D.

Construction. The Department will provide the Contractor with two (2) horizontal and vertical control points establishing the top of slab elevation and two (2) corners of the slab. The Contractor shall provide the additional layout necessary to complete the Work.

All work shall meet the requirements of governmental agencies having jurisdiction and comply with applicable standards and codes. The Contractor shall submit two (2) copies of shop drawings to Department for review at least 15 calendar days prior to incorporation into the work. Shop drawings shall be approved prior to incorporation into the work.

Roof, siding and paint colors shall be selected by Department from manufacturer's standard colors.

Excavation shall meet the requirements of Section 203 Excavation and Embankment.

When the structure is to rest on an excavated surface other than rock, special care shall be taken not to disturb the bottom of the excavation. If the surface upon which the structure is to rest is disturbed, it shall be regraded and recompact to the extent directed by the Resident.

Suitable material taken from excavation shall be used in the construction of subgrade and for backfilling as indicated on the plans, or as directed, except that if the volume of suitable excavated material exceeds that required to construct the site to the grades indicated, the excess shall be used as directed or wasted.

If excavated material is not suitable for backfilling, then granular borrow shall be placed at a vertical plane 18" past the end of the footing from 12" below the bottom of the footing up to the final grade elevation as indicated on the plans.

Backfilling shall meet the requirements of Section 203 Excavation and Embankment. Backfilling shall consist of placing suitable material in all spaces not occupied by structures up to the elevation of the existing ground or other elevations shown on the plans or designated. Backfill material shall be granular borrow or other material designated on the plans and shall be at or near optimum moisture content and shall not contain stones larger than 3 in, frozen lumps, chunks of clay, mineral matter or any other objectionable matter.

For reinforced concrete sections, no backfill shall be placed until the masonry has been in place at least 14 days or until concrete cylinders cured with the structure establish that design strength has been reached.

Unless otherwise approved the material shall be deposited and spread upon compacted material in full width layers not more than 8 inches in depth, loose measure. Sand or gravel soils shall be compacted by vibratory type compaction equipment or by pneumatic tired equipment and, if necessary, by the addition of water. The compacting operations shall be continued until each layer is satisfactorily compacted to its full depth and width.

Unless otherwise indicated on the plans or directed, all sheeting and bracing used during structural excavation shall be removed by the Contractor following the completion of the work, and all voids resulting from use of the sheeting and bracing backfilled where necessary.

Subgrades shall be promptly graded and rolled to minimize absorption of water. When excavating results in a subgrade of unsuitable soil, the Resident may require the Contractor to remove the unsuitable material and backfill the area with approved material.

Placing and compacting of Aggregate Subbase shall meet the requirements of Standard Specification, Section 304 Aggregate Base and Subbase Course.

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 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.

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 make provisions to allow safe access to the work for the Department in order to inspect the work, facilitate ongoing inspection of the work and to measure the work for payment purposes.
- Complete installation to provide weathertight service.
- Completed installation for the roof shall conform, to all applicable National, State and local codes

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.

Closeout Procedures. The Contractor shall make final changeover of permanent locks and deliver keys to Department, and complete final cleaning requirements, including touchup painting, touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

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.
4. Remove snow and ice to provide safe access to building.
5. 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.
6. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
7. Sweep concrete floors broom clean in unoccupied spaces.
8. Remove labels that are not permanent.
9. 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.
10. Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
11. Wipe surfaces of mechanical and electrical equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances. 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.

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 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 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.

Operations and Maintenance Manual 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.

Method of Measurement The Salt Storage Building will be measured for payment as one lump sum, complete in place and accepted.

Basis of Payment The Salt Storage Building 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, including excavation, borrow, gravel, concrete foundation, hot mix asphalt pavement, foundation drain pipe, stone, geotextile, the additional underground electrical as noted on the plans, backfill, labor, equipment and materials for building construction and other contract related incidentals necessary to complete the work.

Grading of the backslopes beyond the pavement limits, loam, seed and mulch will be the responsibility of the Department.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
Building - Salt Storage Building	Lump Sum

SPECIAL PROVISION
SECTION 02724
FOUNDATION DRAIN PIPE

PART 1 – GENERAL

1.1 Summary

- A. Work included: Provide and install non-pressure pipe and fittings of the sizes and types and in the locations shown on the Drawings and as specified herein.

1.2 Delivery, Storage and Handling

- A. Provide all labor necessary to assist the Department to inspect pipe, fittings, gaskets and other materials.
- B. Carefully inspect all materials at the time of delivery and just prior to installation.
- C. Carefully inspect all pipe and fittings for:
 - 1. Defects and damage.
 - 2. Deviations beyond allowable tolerances for joint dimensions.
 - 3. Debris and foreign matter.
- D. Examine area and structures to receive piping for:
 - 1. Defects such as weak structural components that adversely affect the execution and quality of work.
 - 2. Deviations beyond allowable tolerance for pipe clearances.
- E. All materials and methods not meeting the requirements of the Contract Documents will be rejected.
- F. Immediately remove all rejected materials from the Project site.
- G. Start work only when conditions are correct to the satisfaction of the Department.

PART 2 – PRODUCTS

2.1 Non-Perforated Pipe and Fittings

- A. Size 4” dia. And 6” dia. Inclusive
 - 1. PVC Schedule 40
 - 2. ASTM D-2665
 - 3. Fittings and joints to be compatible with pipe.

2.2 Perforated Pipe and Fittings

- A. Size 4” dia. And 6” dia. Inclusive:
 - 1. MDOT, TYPE “B” meeting requirements of Section 605.
 - 2. Corrugated Polyethylene Drainage Tubing for underdrain. ASSHTO M-252.

3. Coiled pipe shall not be used.

PART 3 – EXECUTION

3.1 Inspection

- A. Examine areas to receive piping for the following:
 1. Obstructions that adversely affect the installation and quality of the work.
 2. Deviations beyond allowable tolerances for clearances.
- B. Examine pipe and fittings before installation to assure no defective materials are incorporated. No single piece of pipe shall be laid unless it is generally straight.
- C. Remove and replace all defective materials at no additional cost to the Department.
- D. Start work only when conditions are satisfactory.

3.2 Installation

- A. Install all pipe and fittings to the lines and grades shown on the Drawings and/or as approved by the Department.
- B. Begin laying pipe at the downstream end.
- C. During installation, close open ends with temporary watertight plugs to prevent earth, water and other material from entering the pipe.
- D. Exact location of the drain termination shall be determined on site by the Resident.

SPECIAL PROVISION
SECTION 06100
ROUGH CARPENTRY

PART 1 – GENERAL

1.1 Summary

- A. This work consists of all labor, materials and equipment necessary to complete the work as shown on the Drawings and as specified herein.

1.2 References

- A. International Building Code, Latest Edition.

1.3 Workmanship

- A. Only experienced personnel shall be engaged in this work.

1.4 Delivery, Storage and Handling

- A. Deliver the materials to the job site and store in a safe area, out of the way of traffic, shored up off the ground surface and covered to protect from weather.

PART 2 – PRODUCTS

2.1 Dimension Lumber

- A. Dimension lumber shall be Eastern Spruce or other wood approved by the Department and shall comply with grading requirements of the Northeastern Lumber Manufacturers Association for Common, Number 2 or better, and shall bear the grade stamp.
- B. When specified on the Plans or in part 4, stress grade structural lumber shall be provided. Stress grade lumber shall bear appropriate stamp for the specified grade and species.
- C. Wood for pressure treating and special installation shall be southern yellow pine meeting the requirements of the Southern Pine Inspection Bureau (SPIB) for Number 2 or better.
- D. All lumber shall not exceed 19% moisture content.

2.2 Plywood

- A. All plywood shall be 4/5-ply minimum and shall comply with U.S. Product Standard PS-1 for softwood plywood and shall bear the specified grade and stamp of the American Plywood Association.
- B. Unless otherwise shown on the Drawings, plywood shall meet the following requirements:

<u>Use</u>	<u>Thickness</u>	<u>Grade</u>	<u>Glue</u>	<u>Span Rating</u>
Roof	5/8" T&G	OSB Structural 1	Exterior	40/20
Exterior Sheathing	5/8"	OSB Structural 1	Exterior	32/16
Interior Sheathing	5/8"	CDX	Exterior	32/16
Electrical Backboard	3/4"	BC	Exterior	N/A

- C. All OSB shall be coated oriented strand board (OSB) sheathing in lieu of exterior wall sheathing, equivalent to "Advantech" by Huber Industries. Appropriate Sizes and Grades of plywood may be substituted at the contractor's option.

2.3 Accessories

- A. Nails shall be new, galvanized as appropriate, common nails of appropriate lengths and sizes to adequately join the wood. Use galvanized where exposed to weather or pressure treated lumber or where shown on the Drawings.
- B. Joist hangers, framing anchors shall be 18-gauge, galvanized steel such as manufactured by Kant Sag, Simpson, or approved equivalent.
- C. Special Nails shall be used where shown on the Drawings or as recommended by manufacturer.
- D. Glue shall be an all-purpose subfloor and construction adhesive, suitable for interior and exterior use, as manufactured by DAP, GE, Ohio Sealants, of approved equivalents.

2.4 Pressure Treated Lumber (P.T.)

- A. Lumber or plywood in contact with ground or fresh water shall be treated in accordance with AWWA Standards C2 and LP-22 and shall be rated 0.60 retention.
- B. Lumber in direct contact with concrete, masonry, or steel, not in contact with soil or fresh water shall be treated in accordance with AWWA Standards C2 and LP-2 and shall be rated 0.40 retention.

- C. Pressure treatment shall be water borne chromate copper arsenate (ACQ).
- D. Wood shall be dried after treatment.

PART 3 – EXECUTION

3.1 Preparation

- A. Carefully select individual lumber pieces so that knots and obvious defects will not interfere with placing bolts or proper nailing.
- B. Cut out and discard defects which render a piece unable to serve its intended function.
- C. Lumber will be rejected by the Department if it is excessively warped, twisted, bowed, mildewed or molded, as well as if it is improperly installed.

3.2 Erection

- A. All framing work shall produce joints which are tight, true, and well nailed with members assembled in accordance with the Drawings and with pertinent codes and regulations.
- B. All framing and fastening shall equal or exceed HUD Minimum Property Standards, Manual of Accepted Practices and the requirements of the IBC.
- C. Do not shim any framing member.
- D. Install horizontal and sloped members with crown up.
- E. Do not notch, cut or bore members for pipes, ducts, conduits, or for any other reason, except as shown on the Drawings and as approved the Department.
- F. Bearing surfaces on which structural members rest shall provide a full, even support.
- G. Joists, rafters and similar members shall be fastened with at least two (2) galvanized steel hangers or anchors and nailed completely.
- H. Install solid block bridging at midpoint of joists or as shown on the Drawings.
- I. Provide all shims, blocking and bracing as shown on the Drawings and as approved by the Department to complete the work.
- J. In addition to normal framing operations, install wood blocking or backing required to support the work of other trades.

3.3 Plywood Sheathing

- A. Unless otherwise specified or approved by the Department, install plywood with the face grain perpendicular to framing and central joints over supports. Leave 1/16-inch gap where adjacent plywood panels meet.
- B. Stagger plywood joints so that all joints do not lie on the same support.

3.4 Nailing

- A. Use galvanized nails except as otherwise indicated. Make tight connections between members. Countersink nail heads on exposed carpentry work and fill holes.
- B. Install fasteners without splitting wood; pre-drill as required.
- C. All nailing shall comply with the IBS, Recommended Fastening Schedule (found in table 2304.9.1), unless special requirements are shown on the Drawings.

3.5 Concrete Bearing

- A. All wood which bears against concrete, earth, steel or masonry shall be pressure treated as specified on the Drawings or as approved by the Department.

SPECIAL PROVISION
SECTION 06190
WOOD TRUSSES

PART 1 – GENERAL

1.1 Summary

- A. The work included in this Section shall consist of providing wood trusses and truss accessories where shown on the Drawings, and as specified herein, and as needed for a complete and proper installation.
- B. Related Work: Section 06100 – Rough Carpentry

1.2 Quality Assurance

- A. Truss fabrication and installation shall comply with the International Building Code, latest edition and the requirements and recommendations of the following Truss Plate Institute (TPI) publications:
 - 1. “Design Specification for Metal Plate Connected Wood Trusses”.
 - 2. Commentary and Recommendations for Handling and Erecting Wood Trusses”.
 - 3. “Commentary and Recommendations for Bracing Wood Trusses”.
 - 4. “Quality Control Manual”.
- B. Trusses and metal truss connector plates shall be manufactured by a firm that practices a quality control program comparable to the TPI “Quality Control Manual”.
- C. Use adequate number of skilled workmen who are thoroughly trained and experienced in the necessary crafts who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

1.3 Submittals

- A. Product Date: Within 15 calendar days after the Contractor has received the Department’s notice to Proceed, submit:
 - 1. Materials list of items proposed to be provided under this Section
 - 2. Manufacturer’s specifications and other data needed to prove compliance with the specified requirements.
 - 3. Shop drawings in showing species, sizes, and stress grades of lumber proposed to be used; pitch, span, camber configuration, and spacing of trusses; connector type, thickness, size, location, and design value; bearing details; all other relevant information to show compliance with the specified requirements of the work of this Section.

4. Submit two (2) copies of shop drawings showing types and sizes of metal tie down anchors and any other accessories.
 5. These submittals shall be provided on Shop Drawings signed and stamped by a structural engineer licensed to practice in the State of Maine.
- B. All shop drawings shall be submitted to the Department for review at least 15 calendar days prior to incorporation into the work. All shop drawings shall be reviewed and approved by the Department prior to incorporating into the work.

1.4 Delivery Storage and Handling

- A. Handle and store trusses with care and in accordance with manufacturer's instructions and TPI recommendations, to avoid damage from bending, over-turning, or other cause for which truss is not designed to withstand.
- B. Time delivery and erection of trusses to avoid extended on-site storage.

PART 2 – PRODUCTS

2.1 Wood Trusses

- A. Design wood trusses for the loads shown on the Drawings.
- B. Fabrication:
 1. Cut truss members to accurate lengths, angles and sizes to produce close fitting joints with proper wood-to-wood bearing in assembled units.
 2. Connect truss members by means of metal connector plates accurately located and securely fastened to wood members
- C. Lumber:
 1. All lumber used in the fabrication of wood trusses shall not exceed 19% moisture content.

2.2 Permanent Bracing

- A. Provide 2x6 diagonal bracing of vertical truss members and continuous lateral bracing of intermediate truss members as shown on the Drawings, as recommended by the manufacturer and as approved by the Department.

2.3 Other Materials

- A. Provide other materials, not specifically described but required for a complete and proper installation, subject to the approval of the Department.

2.4 Metal Tie Down Anchors

- A. Provide metal tie down anchors that are nailed to the truss bottom chord, top wall plate and wall stud.
- B. Acceptable Products:
 - 1. Simpson Strong Tie
 - 2. U.S.P. RT.
 - 3. Approved Equal.
- C. Anchors and fasteners shall be galvanized with a minimum G90 coating.

PART 3 - EXECUTION

3.1 Surface Conditions

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.2 Installation

- A. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.
- B. Install the work of this Section in strict accordance with the manufacturer's recommended installation procedures, the approved shop drawings and the recommendations of the Truss Plate Institute, as approved by the Department, anchoring all components firmly into position:
 - 1. Hoist the truss into position with proper bracing secured at designated lifting points.
 - 2. Exercise care to keep bending of trusses to a minimum.
 - 3. Install temporary horizontal and cross bracing to hold trusses plumb and in safe condition until permanent bracing is installed.
 - 4. Install permanent bracing and related components prior to application of loads to trusses.
 - 5. Anchor trusses securely at all bearing points and install metal tie down anchors as shown on the Drawings.
 - 6. Restrict construction loads to prevent overstressing of truss members.
 - 7. Do not cut or remove truss members in the field without approval of the Department and truss manufacturer.

SPECIAL PROVISION
SECTION 07611
METAL ROOFING

PART 1 - GENERAL

1.1 **Summary**

- A. Work included shall consist of installing a standing seam metal roofing complete with concealed fasteners and accessories for a watertight system. Metal roofing shall be continuous, contoured to the profile of the roof arch, with no butt seams.

1.2 **Quality Assurance**

- A. Contractor shall be approved in writing by the roofing manufacturer and shall substantiate a minimum of three (3) years experience installing standing seam roofing.

1.3 **Submittals**

- A. Submit two copies of detailed shop drawings to the Department for review at least 15 calendar days prior to incorporation into the work. Shop drawings shall be approved and assigned a number by the manufacturer.
- B. Shop drawings shall include the following:
- Outline of roof and roof size.
 - Layout of panels
 - Location and types of proposed penetrations.
 - Perimeter details
 - Penetration details
 - Manufacturer's data on the proposed materials including panels, anchor clips and fasteners.
 - Calculations with registered engineer's seal, licensed in the State of Maine, verifying roof panel and attachment method resists applicable wind pressure imposed on it applicable with the IBC 2009.
- C. Submit written approval of contractor by manufacturer.
- D. Submit sample warranty and maintenance instructions.

1.4 **Warranty**

- A. Provide manufacturer's written twenty-year warranty for weather tightness against leaks in roof panels cause by ordinary wear and tear under normal weather conditions.
- B. Roof finish coating shall be warranted against rust, peeling, chipping, cracking and blistering for a period of twenty years.
- C. Contractor shall provide written three (3) year warranty, guaranteeing the roof system

- to be watertight and free of defects.
- D. Contractor shall provide detailed instructions for preventative maintenance and noting a list of harmful substances that may damage roofing.

PART 2 – PRODUCTS

2.1 Roof Panels

- A. Roof panels shall be 24-gauge Grade C Galvalume ASTM 792-86, AZ 55.
- B. Panels shall have a standing, interlocking seam, 16” wide with a seam height of 1.5”.
- C. Panels shall be roll-formed in continuous lengths from eave to ridge.
- D. Roofing color will be Forest Green or as approved by the Department.

2.2 Fasteners

- A. Panels shall be fastened to the substrate with a concealed clip system that accommodates thermal movement.
- B. Fasteners shall be concealed.

2.3 Flashing

- A. Flash all other roof penetrations.
- B. Flashing shall be as recommended by the roofing manufacturer and as approved by the Department. Flashing shall be a minimum of 0.040 aluminum or 24 gauge galvanized steel.
- C. Rubber boot pipe flashing shall be used around vent pipes.

2.4 Sealants

- A. Sealants between roof panels shall be as recommended by the manufacturer.
- B. Provide all required sealants at trim, roof penetrations, etc.
- C. Sealants shall be non-drying elastomer based material.

2.5 Fascia, Trim and Accessories

- A. Fascia and metal trim shall be prefinished 0.040 aluminum or 24 gauges galvanized steel.
- B. Ridge cap shall be a continuous venting metal ridge cover, as provided by the roofing manufacturer.

2.6 Acceptable Manufacturers

- A. Everlast Metals
- B. Approved Equivalent

2.7 Provisions for Expansion/Contraction

- A. End wall trim and roof transition flashings shall allow the roof to move relative to walls as the roof expands and contracts with temperature changes.
- B. Movement of roof panels relative to other panels shall be accommodated by the use of clips that allow movement of up to 1" in either direction.
- C. Ridge assembly shall be designed to allow roof panels to move lengthwise with expansion/contraction as the roof panel temperature changes. Parts shall be factory pre-punched for correct field assembly. If panels are formed in the field by manufacturer, panels may be punched in field as required by manufacturer. Panel closures and interior reinforcing straps shall be installed to seal the panel ends at the ridge. The attachment fasteners shall not be exposed on the weather side. A lock seam plug shall be used to seal the lock seam portion of the panel. A hi-tensile steel ridge cover shall span from panel closure to panel closure and flex as the roof system expands and contracts.

PART 3 – EXECUTION

3.1 Inspection

- A. Contractor shall inspect the substrate prior to installing metal roofing to ensure that the surface is sound and uniform. Correct any irregularities prior to proceeding with the work.

3.2 Installation

- A. Fasten metal panels to structural substrate with movable clips that are seamed into the standing seam side lap
- B. Fasten clips to structural substrate in accordance with manufacturer's recommendations.
- C. Panel to panel connections shall be made with a positive, standing lock seam, continuously locked or crimped together by mechanical means during installation.
- D. All side lap sealant shall be factory applied.
- E. Install accessories such as penetration flashings and eave closures in accordance with manufacturer's recommendations, as approved by the Department.

3.3 Final Inspection

- A. A final inspection of the roofing system shall be made by the roofing manufacturer's representative as soon as construction is complete. Coordinate final manufacturer's inspection with the Department. Provide written certification that the metal roof system has been installed in accordance with the manufacturer's recommendations.

SPECIAL PROVISION
SECTION 07467
METAL SIDING

PART 1 – GENERAL

1.1 Summary

- A. Provide preformed metal siding and roofing where shown on the Drawings, as specified herein and as needed for a complete and proper installation.
- B. Related Work: Documents affecting work of this Section include, but are not necessarily limited to, Section 06100 - Rough Carpentry and Section 06192- Laminated Lumber.

1.2 Quality Assurance

- A. Use adequate number of skilled workmen who are thoroughly trained and experienced in the necessary crafts who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

1.3 Submittals

- A. Product Date: Within 15 calendar days after the Contractor has received the Department's notice to Proceed, submit:
 - Materials list of items proposed to be provided under this Section
 - Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
 - Shop drawings in sufficient detail to show fabrication, installation, anchorage and interface of the work of this Section with the work of adjacent trades;
 - Sample of two (2) full panel width by 6" length of finished exterior siding, interior liner and permanent trim pieces.
 - Sample of each fastener employed, one each.
 - Manufacturer's recommended installation procedures which, when approved by the Department, will become the basis for accepting or rejecting actual installation procedures used on the work.

PART 2 – PRODUCTS

2.1 Preformed Metal Siding and Roofing

- A. Metal siding shall be 26 gauge Everlast II with a Patina Green color finish, or equivalent.
- B. Panels shall be a maximum length possible to minimize end laps.

2.2 Accessory Items

- A. Provide subgirts, perimeter trim, closures and other required components as needed to comprise the complete preformed metal siding system, using the materials and gauges recommended by the manufacturer and approved by the Department, and providing finish on exposed surfaces precisely matching the finish on the other exposed surfaces.
- B. Provide fasteners, washers and sealants as recommended by the manufacturer.

PART 3 - EXECUTION

3.1 Surface Conditions

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.

3.2 Installation

- A. Install the work of this Section in strict accordance with the manufacturer's recommended installation procedures as approved by the Department.
- B. Set siding plumb, level and true to line, without warp or rack, to a tolerance of 1 in 600.
- C. Touch up mars, scratches, and cut edges to match original finish.

SPECIAL PROVISION
SECTION 07920
SEALANTS AND CAULKING

PART 1 – GENERAL

1.1 Summary

- A. Provide all labor, materials and equipment to complete sealing and caulking as shown on the drawings and as specified herein.

1.2 Scope of Work

- A. Sealing and caulking shall be performed on all exterior joints including but not limited to:
 - 1. Around door, frames and windows.
 - 2. Joints around wall, ceiling and penetrations such as electrical boxes, pipes, etc.
 - 3. Joints between dissimilar building materials such as brick and wood, wood and metal, etc., where water might enter.
- B. Interior caulking of all wall, floor, and ceiling penetrations.
- C. Sealing of concrete joints is covered on the plans.

1.3 References

- A. All sealants and caulking shall comply with ASTM C920, Standard Specification for elastomeric joint sealants.

PART 2 – PRODUCTS

2.1 Exterior Caulking

- A. Exterior caulking between prefinished surfaces shall be a one component silicone joint sealant; “Spectrum 1” by Tremco Sealant Systems, Dow Corning “795 Silicone Building Sealant”, or approved equivalent.
- B. Exterior caulking for use on paintable surfaces shall be an acrylic latex joint sealant; “Tremco Acrylic Latex Caulk”; Bostik “Chem-Caulk 600”, or approved equivalents.

2.2 Interior Caulking

- A. Interior caulking for bedding electrical boxes, outlets, pipes or other wall penetrations and around interior doors, frames and windows shall be a non-hardening sealant; “Tremco Acoustical Sealant”, Bostik “Chem-Caulk 600”, or approved equivalents.
- B. Interior caulking per penetrations through fire wall or smoke barriers such as conduits, pipes and ducts shall be a one component fire resistant caulk or putty; 3M Fire Barrier Caulk “CP25” or Putty “303”, or approved equivalents.

2.3 Joint Filler

- A. Joint filler for backing caulking shall be non-absorbent precompressed foam sealant; “Will-Seal 150”, by Will-Seal Construction Foams; “York-Seal 100” by York Manufacturing, Inc., or approved equivalents.

PART 3 – EXECUTION

3.1 Preparation

- A. All joints and spaces to be caulked shall be dry, clean and free from dust and loose materials.
- B. If necessary mask or otherwise protect adjacent surfaces.

3.2 Installation

- A. All sealants and caulking shall be installed according to the manufacturer’s recommendations.
- B. Caulking shall be applied with suitable equipment such as with a caulking gun.
- C. Use foam backing for joints deeper than ½-inch. Pack into joint allowing at least ¼-inch for caulking.
- D. Caulking shall be applied so that surfaces are slightly concave, tight and smooth. Joints shall be air and watertight.
- E. Caulk or putty around fire and smoke wall penetrations shall be applied so as to provide a complete fire barrier sealing system.
- F. Remove excess caulking and clean adjacent surfaces with approved cleaners.

SPECIAL PROVISION
SECTION 08250
DOORS, FRAMES AND HARDWARE

PART 1 – GENERAL

1.1 Summary

- A. This work shall include all labor, materials and equipment necessary to complete the work as shown on the drawings and as specified herein.

1.2 Submittals

- A. Contractor shall submit two (2) copies of shop drawings to the Department 15 calendar days prior to installation. Only doors for which there are reviewed and approved shop drawings shall be incorporated into the work.

1.3 Quality Assurance

- A. Only experienced skilled workmen shall be engaged in this work.

1.4 Delivery Storage and Handling

- A. Deliver doors and all necessary equipment in manufacturer's unopened containers.
- B. Store material in a protected area to prevent damage.
- C. Protect doors and equipment during and after installation from splashing or the accumulation or paint, concrete, mortar, or other foreign material.

PART 2 – PRODUCTS

2.1 Acceptable Manufacturers

- A. Therma-Tru Smooth Star flush panel fiberglass door.
- B. Sargent Lock Co. 10 lines Series Bored Locks
- C. Approved equivalents.

2.2 Fiberglass Doors and Frames

- A. Fiberglass doors shall be insulated core doors, 1-3/4" thick, of the sizes and type as shown on the drawings and as specified herein.
- B. Frames shall be pre-assembled units made of Grade A pine.
- C. Doorstops, latches, doorknobs, hinges, fasteners, etc., for all doors installed shall be provided by the Contractor.

2.3 Door Hardware

- A. Door hardware shall be equivalent to Sargent.
- B. All hardware shall be lever-style handles with a dull chrome finish.
- C. Door closers shall be full rack and pinion type contained in a permanent mold aluminum body and equipped with a single valve installed on all doors.
- D. Hinges shall be full mortise type, 4"x4", concealed ball bearing, stainless steel, three (3) per door, equivalent to Hager Tri Con Hinges #BB800.
- E. Door stops for interior doors shall be as manufactured by H.B. Ives, wall mounted #65 door stop, aluminum finish.

2.4 Weather-stripping

- A. Acceptable Manufacturers:
 - 1. National Guard Products, Inc.
 - 2. Reese
 - 3. Approved equivalents.
- B. Head and jamb weather-stripping shall be nylon brush gasket, National Guard Products #C607, 1/2" X 1/4" or approved equivalent.
- C. Door bottom seal shall be equivalent to National Guard Products aluminum and vinyl seal, and surface mount nylon brush gasket #D698.

PART 3 – EXECUTION

3.1 Doors and Frames

- A. Install units in compliance with the manufacturer's specifications and as approved by the Department.
- B. Frames must be rigid and present a neat appearance.
- C. Frames must be installed with not less than three wall anchors per jamb and an anchor to the floor at each jamb.
- D. The partition shall enter the frame so that the two work as a unit.
- E. Install all units plumb, level, straight and snug fitted.
- F. Take care not to damage door surface, Defects in surface finish such as hammer marks, scratches, and chips shall be repaired to the satisfaction of the Department.

3.2 Hardware

- A. Install hardware on all doors as specified.
- B. Install doorstops for all doors at heights recommended by the manufacturer.
- C. Provide necessary shims and block to properly install units.

3.3 Finish

- A. Paint all doors as shown in Finish Schedule of the Specifications, Section 09000.
- B. All colors and products are to be selected and approved by the Department.

3.4 Cleanup and Protections

- A. Clean all doors completely. Wash all windows with approved glass cleaner.
- B. Protect all door units, replacing any breakage or defective parts until accepted by the Department.

SPECIAL PROVISION
SECTION 08360
OVERHEAD DOORS

PART 1 - GENERAL

1.1 Summary

- A. Work includes the furnishing and installation of overhead door and accessories of the types and sizes in the locations shown on the Drawings.

1.2 Shop Drawings

- A. Two copies of the shop drawings shall be submitted to the Department for all doors fabricated off site and to be installed on site.
- B. All shop drawings shall be submitted to the Department for review at least 15 days prior to incorporation into the work. All shop drawings shall be reviewed and approved by the Department prior to incorporating into the work.

1.3 Delivery, Storage and Handling

- A. Deliver doors and all necessary equipment in manufacturers unopened containers.
- B. Store materials in a protective area to prevent damage of any nature.
- C. Handle using manufacturer's recommendations.

1.4 Protection

- A. Protect doors and equipment during and after installation from splashing or the accumulation of paint, concrete, mortar or other foreign material.

PART 2 – PRODUCTS

2.1 Materials

- A. Doors shall be of the following construction:
 - 1. 1½" minimum thick sections.
 - 2. Galvalume interior and exterior skin.
 - 3. Thermal break between all interior and exterior metal skin.
- B. Acceptable manufacturers:
 - 1. Overhead Door Corporation Thermacore, Series 591
 - 2. Raynor Company, ThermaSeal Basic
 - 3. Approved Equivalents.

2.2 Seals

- A. Doors shall be equipped with the following seals:
 - 1. Joint seals between sections.
 - 2. Perimeter seals on ends of the exterior surface.
 - 3. A top seal in the top section to seal against the header.
 - 4. An astragal on the bottom section.
- B. Doors shall have an air infiltration rate of 0.1 CFM/ft at a pressure difference of 0.112 H O.
- C. All seals shall be factory installed.

2.3 Weather-stripping

- A. Head and jamb weather-stripping shall be EPDM rubber tube seals and door bottoms shall be rubber bulb-type seal.

2.4 Tracks and Hardware

- A. Doors shall be equipped with 3” galvanized tracks.
- B. Track rollers shall be hardened steel with ball bearing.
- C. Tracks shall be angle mounted at 45° or as approved by the Department.
- D. Hinges shall be galvanized steel, strap type hinge with 20 gauge reinforcement strips at each hinge location.
- E. Doors shall be installed on high lift tracks.
- F. Contractor shall build door jamb as required for proper installation of all door tracks and hardware.

2.5 Operators

- A. Provide Hoist type door operator Min 1/2 HP, equivalent to LiftMaster Model H- 75-11 L4.
- B. Provide three-button control. Up/Down/Stop in waterproof box.
- C. Provide auxiliary chain hoist.
- D. Provide solenoid break to prevent door coasting.
- E. Provide emergency manual operation feature.
- F. Provide external radio control terminals.

2.6 Options

- A. Doors shall be equipped with a bottom-sensing edge that stops or reverses the door’s travel when meeting an obstruction.

2.7 Warranty

- A. Doors and hardware shall have a manufacturer's warranty for one year for all materials and workmanship.

PART 3 – EXECUTION

3.1 Installation

- A. Install doors and hardware in accordance with approved shop drawings and manufacturer's instructions.
- B. Test operation of doors and make all necessary adjustments to insure proper operation.

Part 4 – SUPPLEMENTAL SPECIFICATIONS

4.1 Door Size

- A. Door shall be 18'-0" high and 16'-0" wide as indicated on contract drawings.

SPECIAL PROVISION
SECTION 09900
PAINTING

PART 1 – GENERAL

1.1 Summary

- A. This work shall consist of all labor, materials and equipment necessary to complete painting as shown on the Drawings and as specified herein.
- B. In general, all unfinished surfaces shall be painted or stained unless otherwise specified.

1.2 Submittals

- A. Contractor shall submit color samples, manufacturer and paint specifications to the Department for review 15 days prior to incorporation into the work. Provide two (2) copies of product information.

1.3 Scope of Work

- A. This work shall include prefinishing and painting or staining of all exposed surfaces and specified unexposed surfaces, except factory or prefinished surfaces. Also included is touching up of prefinished surfaces as required and/or as approved by the Department.

PART 2 –PRODUCTS

2.1 Paint

- A. All materials shall be top quality products of the type and texture as shown on the Drawings and/or as specified in Part 4 of these specifications.
- B. Acceptable manufacturers include: Glidden, Olympic, California, Benjamin Moore, Sherwin Williams and other approved equivalents.
- C. All colors shall be as selected by the Department from samples submitted by the Contractor.

2.2 Painting Accessories

- A. Turpentine shall be pure gum spirits conforming to ASTM DB-65.
- B. Putty shall be as recommended by paint or stain manufacturers and as approved by the Department.

PART 3 - EXECUTION

3.1 Preparation

- A. Prior to painting or staining ensure that all surfaces are finished and ready for application.
1. Wood Surfaces:
 - Stain to smooth finish and clean all dust from surfaces. Fill and nail holes, cracks, and other irregularities with approved putty. Pre-color all putty to be used under natural finish wood.
 - Shellac all knots and pitch streaks or pockets to prevent bleeding.
 - Apply prime coat as recommended by manufacturer. Sand lightly where necessary to smooth surface.
 2. Metal surfaces:
 - Clean all grease, rust and dirt from surface. Feather edges of chipped paint on pre-painted items.
 - If so approved by the Department, sandblast or wire brush all metal surfaces to obtain a suitable surface for painting. This procedure will normally be required for refinishing previously painted surfaces which are chipping or peeling.
 - Prime metal surfaces with approved metal primers.
 - Galvanized and prefinished surfaces shall not to be painted unless specified in Painting Schedule.

3.2 All Surfaces

- A. Apply paint or stain only to clean, dry surfaces. Do not paint or stain in the rain or in very humid conditions.
- B. Use masking tape, drop cloths and other means protection to adequately protect adjacent surfaces from dip, spatters and overruns.

3.3 Application

- A. Apply paint or stain as recommended by the manufacturer on properly prepared surfaces according to the paint schedule in Part 4 of these Specifications.
- B. Thoroughly brush or roll all coats to achieve a uniformly smooth coverage.
- C. Allow each coat to dry 48 hours or longer if recommended by manufacturer before applying subsequent coats.
- D. Do not apply paint, stain, varnish or shellac when temperatures are below 45°F unless provision for heating is made.
- E. All finishes shall be smooth, free from runs and sags, streak, brush fibers and other defects. All edges shall be straight and sharp.

- F. Refinish and paint to match any existing adjacent areas which were distributed as a result of the work.

3.4 Cleanup and Protection

- A. Clean all areas of drippings, spatters and debris. Remove all masking tape and clean glass and other areas as required.
- B. Touch up all defective areas to the satisfaction of the Department.
- C. Protect all surfaces until acceptance by the Department.

3.5 Touch-Up Materials

- A. Partially used cans shall also be left with the Owner.

PART 4 – SUPPLEMENTAL SPECIFICATIONS

4.1 Paint Schedule

SURFACE	PRIMER	FINISH
Fiberglass Door and Frame	1 Coat Acrylic Latex	2 Coats Acrylic Latex Semi-gloss
Interior Plywood and misc. wood	1 Coat Acrylic Latex	2 Coats Acrylic Latex Egg Shell

SPECIAL PROVISION
SECTION 15622
EXHAUST FANS

PART 1 – GENERAL

1.1 Description

A. Work Included: Provide wall mounted exhaust fan, intake louver, controls and accessories where shown on the Drawings, as specified herein, and as needed for a complete and proper installation.

B. Related Work:

1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Rough Carpentry 06100, Metal Siding 07467 and Electrical Supply.

1.2 Quality Assurance

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods for proper performance of the work of this Section.

1.3 Submittals

A. Submit: Shop drawings for all materials, equipment and accessories of this section. Submit at least 15 calendar days prior to installation.

PART 2 – PRODUCTS

2.1 Wall Mounted Exhaust Fan and Intake Louver

A. Furnish and install high-pressure belt drive fan, 1 ½ HP, 36” propeller diameter, wall mounted, 13,400 cfm capacity at 1/8” S.P., single phase motor, epoxy coated unit, equivalent to Airmaster HA36KA.

B. Fan units shall be complete with balanced propellers and motor and include the following:

1. Aluminum wall collar.
2. Wire mesh safety guards on the propeller and motor side.
3. Motor mountings with vibration eliminators.
4. Epoxy coated steel weatherhood with bird screen.
5. Manual motor starter with overload protection.
6. Weather resistant epoxy coated steel wall shutter with motor operated shutters. Motor shall open shutters whenever the exhaust fan is operating. Provide mounting collar and weatherhood with bird screen for wall shutter.

2.2 Other Materials

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Engineer.

PART 3 – EXECUTION

3.1 Surface Conditions

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 Coordination

- A. Coordinate as required with other trades to assure proper and adequate provision of the work of those trades for interface with the work of this Section.

3.3 Preparation

- A. Flashing:
 1. Where items of the Section penetrate the roof, outer walls or waterproofing of any kind, provide under this Section all base flashing and counter flashing required at such penetration.

3.4 Testing and Adjusting

1. Test and adjust each piece of equipment and each system as required to assure proper balance and operation.
 - a) Test and regulate ventilation systems to conform to the air volumes shown on the approved design drawings.
 - b) Make tests and adjustments in apparatus and ducts for securing the proper volume of air for each grille.
2. Eliminate noise and vibration and assure proper function of all controls and operation in accordance with the approved design.

SPECIAL PROVISION
SECTION 16500
Lighting

PART 1 – GENERAL

1.1 Summary

- A. This work shall include all labor, materials and equipment necessary to install lighting fixtures and accessories as shown on the drawings and as specified herein.
- B. All work shall conform to the National Electrical Code and other applicable codes.

1.2 Submittals

- A. Contractor shall submit two (2) copies of all lighting equipment and accessories to the Department at least 15 days prior to incorporation into the work.
- B. Provide photometric data on all lighting units.

1.3 Permits

- A. Contractor shall obtain and pay for electrical permit from local electrical inspector.
- B. Copies of permit shall be sent to the Department.

PART 2 – PRODUCTS

2.1 Interior Lights

- A. H.E. Williams 5” Deep Fully Enclosed Industrial Light Fixture, Model # 92-8-454T5H-A-EB2/2-SSLATCH-SSMB with attached, Hubbell Fixture Mounted Occupancy Sensors

2.2 Exterior Lights

- A. LED Flood Light Equivalent to Lithonia D-Series Size 3 with Photocell and switch.

PART 3 – EXECUTION

3.1 Installation

- A. Install light fixture where shown on the drawings, complete with lamps, lenses and all accessories securely fastened in place.

- B. Follow manufacturer's instructions and recommendations completely.
- C. Light fixtures shall be installed in accordance with the latest edition of the "National Electrical Code"

3.2 Cleanup and Testing

- A. Test all fixtures and equipment to the satisfaction of the Department.
- B. Repair or replace any defective fixtures, lamps or finishes.
- C. Clean all fixtures and lenses at the completion of the project.

3.3 Warrantee

- A. All materials and work shall be warranted for one (1) year from date of acceptance by the Department.
- B. Contractor shall supply a minimum of 10% spare lamps and 5% spare ballasts to the Department at completion.
- C. Any additional lamps beyond the spares provided shall be replaced at no additional cost to the Department during the warranty period.

SPECIAL PROVISIONS
ADDITIONS AND REVISIONS TO STANDARD SPECIFICATIONS

SPECIAL PROVISION SECTION 101
CONTRACT INTERPRETATION

101.2 Definitions Add the following:

“MaineDOT The Department of Transportation of the State of Maine, as established by 23 MRSA §4205 et seq. for the administration of Highway, Bridge, and other public Works; acting through the Commissioner and his/her duly authorized representatives.”

SPECIAL PROVISION SECTION 102
BIDDING

102.11.1 Non-curable Bid Defects E. Delete the entire section 102.11.1 E and replace with the following:

- (1) “The unit price and bid amount is not provided if the item quantity is not one or lump sum, or
- (2) the unit price, bid amount or lump sum price is not provided if the item quantity is one or lump sum or
- (3) the lump sum contract price is not provided or
- (4) the unit price, bid amount or lump sum price is illegible as determined by the Department.”

102.11.2 Curable Bid Defects A. Delete the section and replace with the following:

“The Bidder only signs one of the Contract forms or the Bidder does not sign the Contract form but does sign the Schedule of Items.”

102.11.2 Curable Bid Defects Add the following after 102.11.2 E:

“F. If a submitted bid contains any additional conditions or alternate bidding language, the Bidder may cure the defect by removing all conditions and alternate language or the Department will reject the bid as non-responsive.”

SPECIAL PROVISION SECTION 103
AWARD AND CONTRACTING

103.1.1 Unit Prices Govern Add the following at the end of the paragraph:

“If the item quantity is one and either a unit price or bid amount is not provided, the unit price or bid amount omitted shall be determined mathematically by the Department.”

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.”

103.5.4 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 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.”

SUPPLEMENTAL SPECIFICATIONS
(Corrections, Additions, & Revisions to Standard Specifications - March 2020)

SECTION 626
**FOUNDATIONS, CONDUIT, AND JUNCTION BOXES FOR HIGHWAY
SIGNING, LIGHTING, AND SIGNALS**

626.034 Concrete Foundations Revise this Section by changing '626.037' to '**626.036**' in the Second Paragraph which begins with "Foundations shall consist of cast-in-place...".

SECTION 703
AGGREGATES

Add the following to the beginning of Section 703 - Aggregates

703.01 Fine Aggregate for Concrete Fine aggregate for concrete shall consist of natural sand or, when approved by the Resident, other inert materials with similar characteristics or combinations thereof, having strong, durable particles. Fine aggregate from different sources of supply shall not be mixed or stored in the same pile nor used alternately in the same class of construction or mix without permission of the Resident.

All fine aggregate shall be free from injurious amounts of organic impurities. Should the fine aggregate, when subjected to the colorimetric test for organic impurities, AASHTO T 21, produce a color darker than the reference standard color solution (laboratory designation Plate III), the fine aggregate shall be rejected.

Fine aggregate shall have a sand equivalent value of not less than 75 when tested in accordance with AASHTO T 176.

Fine aggregate sources shall meet the Alkali Silica Reactivity (ASR) requirements of Section 703.0201.

The fineness modulus shall not be less than 2.26 or more than 3.14. If this value is exceeded, the fine aggregate will be rejected unless suitable adjustments are made in proportions of coarse and fine aggregate. The fineness modulus of fine aggregate shall be determined by adding the cumulative percentages of material by weight retained on the following sieves: Nos. 4, 8, 16, 30, 50, 100 and dividing by 100.

Fine aggregate, from an individual source when tested for absorption as specified in AASHTO T 84, shall show an absorption of not more than 2.3 percent.

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves
3/8 inch	100
No. 4	95-100
No. 8	80-100
No. 16	50-85
No. 30	25-60
No. 50	10-30
No. 100	2-10
No. 200	0-5.0

703.02 Coarse Aggregate for Concrete Coarse aggregate for concrete shall consist of crushed stone or gravel having hard, strong, durable pieces, free from adherent coatings and of which the composite blend retained on the 3/8 inch sieve shall contain no more than 15 percent, by weight of flat and elongated particles when performed in accordance with test method ASTM D 4791, Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate, using a dimensional ratio of 1:5.

The coarse aggregate from an individual source shall have an absorption no greater than 2.0 percent by weight determined in accordance with AASHTO T 85 modified for weight of sample.

The composite blend shall have a Micro-Deval value of 18.0 percent or less as determined by AASHTO T 327 or not exceed 40 percent loss as determined by AASHTO T 96.

Coarse aggregate sources shall meet the Alkali Silica Reactivity (ASR) requirements of Section 703.0201.

Coarse aggregate shall conform to the requirements of the following table for the size or sizes designated and shall be well graded between the limits specified.

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves			
	A	AA	S	LATEX
Grading	A	AA	S	LATEX
Aggregate Size	1 inch	3/4 inch	1 1/2 inch	1/2 inch
2 inch			100	
1 1/2 inch	100		95-100	
1 inch	95-100	100	-	
3/4 inch	-	90-100	35-70	100
1/2 inch	25-60	-	-	90-100
3/8 inch	-	20-55	10-30	40-70
No. 4	0-10	0-10	0-5	0-15
No. 8	0-5	0-5	-	0-5

No. 16	-	-	-	-
No. 50	-	-	-	-
No. 200	0 - 1.5	0 - 1.5	0 - 1.5	0 - 1.5

703.0201 Alkali Silica Reactive Aggregates. All coarse and fine aggregates proposed for use in concrete shall be tested for Alkali Silica Reactivity (ASR) potential under AASHTO T 303 (ASTM C 1260), Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars Due to Alkali-Silica Reaction, prior to being accepted for use. Acceptance will be based on testing performed by the Department. Sampling will be performed by the Department from stockpiles located at the Contractor's/supplier's ready mixed concrete plants. Aggregate approvals will be performed on a 3-year cycle, unless the source or character of the aggregate in question has changed within 3 years from the last test date.

A list of pre-approved coarse aggregate and aggregate-cement/pozzolan blends is maintained by the Department and will determine the acceptability of concrete mix designs proposed for use.

As per AASHTO T 303 (ASTM C 1260): Use of a particular coarse or fine aggregate will be allowed with no restrictions when the mortar bars made with this aggregate expand less than or equal to 0.10 percent at 30 days from casting. Use of a particular coarse or fine aggregate will be classified as potentially reactive when the mortar bars made with this aggregate expand greater than 0.10 percent at 30 days from casting. Use of this aggregate will only be allowed with the use of cement-pozzolan blends and/or chemical admixtures that result in mortar bar expansion of less than 0.10 percent at 30 days from casting.

Acceptable pozzolans and chemical admixtures that may be used when an aggregate is classified as potentially reactive include the following:

- a. Class F Coal Fly Ash meeting the requirements of AASHTO M 295.
- b. Ground Granulated Blast Furnace Slag (Grade 100 or 120) meeting the requirements of AASHTO M 302.
- c. Densified Silica Fume meeting the requirements of AASHTO M 307.
- d. Lithium Hydroxide Monohydrate (LiOH-H₂O).

Pozzolans or chemical admixtures required to offset the effects of potentially reactive aggregates will be incorporated into the concrete at no additional cost to the Department.

Aggregates classified as potentially reactive by the requirements of this specification may be used if certified test results from an accredited independent laboratory utilizing the current AASHTO T 303 (ASTM C 1260) Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars Due to Alkali-Silica Reaction, indicating an acceptable alkali-aggregate combination, are submitted to the Department.

703.05 Aggregate for Sand Leveling Aggregate for sand leveling shall be sand of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The aggregate shall meet the grading requirements of the following table.

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves
3/8 inch	85-100
No. 200	0-5.0

703.06 Aggregate for Base and Subbase The following shall apply to Sections (a.) and (c.) below. The material shall have a Micro-Deval...” and replace with “The material shall have a minimum degradation 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 T 113T113, Method of Test for Determination of Degradation Value (January 2009 version) shall be performed), except that the test shall be performed on the reported degradation value will be the result of testing a single specimen from that portion of the sample that passes the 1/2 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, minus any reclaimed asphalt pavement 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. If AASHTO T 96 is used for acceptance of the material, the material shall be retested at intervals of 25%, 50% and 75% completion of the course.

Recycled Asphalt Pavement (RAP) shall not be used for or blended with aggregate base or subbase.

- a. Aggregate for base, Type A and B shall be crushed ledge or crushed gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a 3 inch sieve shall meet the grading requirements of the following table:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves	
	Type A	Type B
1/2 inch	45-70	35-75
1/4 inch	30-55	25-60
No. 40	0-20	0-25
No. 200	0-6.0	0-6.0

At least 50 percent by weight of the material retained on the No. 4 sieve shall have at least one fractured face as tested by AASHTO T 335.

Type A aggregate for base shall only contain particles of rock that will pass the 2 inch square mesh sieve.

Type B aggregate for base shall only contain particles of rock that will pass the 4 inch square mesh sieve.

b. Aggregate for base, Type C shall be crushed ledge or crushed gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The material shall meet the grading requirements of the following table:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves	
	Type C	
4 inches	100	
3 inches	90-100	
2 inches	75-100	
1 inch	50-80	
½ inch	30-60	
No. 4	15-40	
No. 200	0-6.0	

At least 50 percent by weight of the material coarser than the No. 4 sieve shall have at least one fractured face as tested by AASHTO T 335.

c. Aggregate for subbase shall be sand or gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a 3 inch sieve shall meet the grading requirements of the following table:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves	
	Type D	Type E
½ in	35-80	
¼ inch	25-65	25-100
No. 40	0-30	0-50
No. 200	0-7.0	0-7.0

Type D aggregate for subbase gravel may contain up to 50 percent by weight Recycled Concrete Aggregate (RCA). When RCA is used, the portion of the resulting blend of gravel and RCA retained

on a ½” square mesh sieve shall contain a total of no more than 5 percent by weight of other recycled materials such as brick, concrete masonry block, or asphalt pavement as determined by visual inspection.

RCA shall be substantially free of wood, metal, plaster, and gypsum board as defined in Note 9 in Section 7.4 of AASHTO M 319. RCA shall also be free of all substances that fall under the category of solid waste or hazardous materials.

Aggregate for subbase shall not contain particles of rock which will not pass the 6 inch square mesh sieve.

