SOUTH PORTLAND AIR NATIONAL GUARD REPAIR PAVEMENTS PROJECT NO. 3249 SOUTH PORTLAND , ME



PROJECT MANUAL

15 JULY 2021

TABLE OF CONTENTS

DIVISION 00 – PROCUREMENT AND CONTACTING REQUIREMENTS

- 00 01 01 TITLE PAGE
- 00 10 10 TABLE OF CONTENTS
- 00 11 13 NOTICE TO CONTRACTORS
- 00 21 13 INSTRUCTIONS TO BIDDERS
- 00 41 13 BID FORMS
- 00 52 13 CONTRACT AGREEMENT
- 00 72 13 GENERAL CONDITIONS
- 00 7300 SPECIAL CONDITIONS STATE CONTRACTS
- 00 73 46 WAGE DETERMINATION SCHEDULE

DIVISION 01 – GENERAL REQUIREMENTS

- 202.61 REMOVING PAVEMENT SURFACES (MILLING)
- 011000 SUMMARY OF WORK
- 015000 TEMPORARY CONTROLS
- 312000 EARTH
- 321216 ASPHALT

00 11 13 Notice to Contractors

Repair Pavements South Portland Air National Guard B

BGS project number 3249

The cost of the work is approximately \$47,000. The work to be performed under this contract shall be completed on or before the Substantial Completion date of *October 15, 2021*.

 Submit bids on a completed Contractor Bid Form, plus bid security when required, all scanned and included as an attachment to an email with the subject line marked "Bid for *Repair Pavements South Portland ANG* " and addressed to the Bid Administrator at: glen.a.tompkins.1@us.af.mil and copy to BGS.Architect@Maine.gov, so as to be received no later than 2:00 PM on August 12, 2021. Bid submissions will be opened and read aloud at the time and date noted above at the Bureau of General Services office, accessible as a video conference call. Those who wish to participate in the call must submit a request for access to BGS.Architect@Maine.gov.

Any bid received after the noted time will not be considered a valid bid and will remain unopened. Any bid submitted by any other means will not be considered a valid bid. The Bid Administrator may require the Bidder to surrender a valid paper copy of the bid form or the bid security document in certain circumstances.

Questions on the bid opening process shall be addressed to the Bid Administrator: Glen Tompkins 101st Civil Engineering Squadron, Maine Air National Guard,106 Ashley Street Bangor Maine 04401, glen.a.tompkins.1@us.af.mil and copy to Mr. Robert Gurney, Division of Planning, Design & Construction, Bureau of General Services, 77 State House Station, Augusta, Maine 04333-0077, BGS.Architect@Maine.gov.

- 2. The bid shall be submitted on the Contractor Bid Form (section 00 41 13) provided in the Bid Documents. The Owner reserves the right to accept or reject any or all bids as may best serve the interest of the Owner.
- 3. Bid security are not required on this project. If noted above as required, the Bidder shall include a satisfactory Bid Bond (section 00 43 13) or a certified or cashier's check for 5% of the bid amount with the completed bid form submitted to the Owner. The Bid Bond form is available on the BGS website.
- 4. Performance and Payment Bonds *are not required* on this project. If noted above as required, the selected Contractor shall furnish a 100% contract Performance Bond (section 00 61 13.13) and a 100% contract Payment Bond (section 00 61 13.16) in the contract amount to cover the execution of the Work. Bond forms are available on the BGS website.
- 5. Filed Sub-bids are not required on this project.
- 6. There *are no* Pre-qualified General Contractors on this project. If Pre-qualified General Contractors are identified for this project, the name of each company, with their city and state, are listed below.

00 11 13 Notice to Contractors

7. An on-site pre-bid conference will be conducted for this project.

If a pre-bid conference is scheduled, it is *optional* for General Contractors and optional for Subcontractors and suppliers. Contractors who arrive late or leave early for a mandatory meeting may be prohibited from participating in this meeting and bidding. <u>Contractors planning to attend</u> the conference will be required to submit the names , home address and drivers license numbers to the on site contract administrators email addresses listed below 3 days prior to accessing the ANG Base.

Site Visit Date : August 4, 2021 10:30 AM at South Portland Air National Guard Station Bldg 1 Conference Room 50 Western Avenue POC Glen Tompkins Office 207 404-7303 Cell 209-907-0737 glen.tompkins.1@us.af.mil; tyler.field@us.af.mil

- Bid Documents full sets only will be available electronically on or about *July 23, 2021* and may be obtained *"at no cost"* from: 101st Civil Engineering Squadron, Maine Air National Guard Glen Tompkins - glen.tompkins.1@us.af.mil
- 9. Bid Documents may be examined by appointment at:

South Portland Air National Guard	Maine Air National Guard
50 Western Avenue	101st Civil Engineering Squadron
South Portland, Me	106 Ashely Avenue
Phone 207 404-7303	Bangor, Maine
	207 404-7303

00 21 13 Instructions to Bidders

- 1. Bidder Requirements
- 1.1 A bidder is a Contractor who is qualified, or has been specifically pre-qualified by the Bureau of General Services, to bid on the proposed project described in the Bid Documents.
- 1.2 Contractors and Subcontractors bidding on projects that utilize Filed Sub-bids shall follow the requirements outlined in these Bid Documents for such projects. See Section 00 22 13 for additional information.
- 1.3 Contractors and Subcontractors are not eligible to bid on the project when their access to project design documents prior to the bid period distribution of documents creates an unfair bidding advantage. Prohibited access includes consultation with the Owner or with design professionals engaged by the Owner regarding cost estimating, constructability review, or project scheduling. This prohibition to bid applies to open, competitive bidding or pre-qualified contractor bidding or Filed Sub-bidding. The Bureau may require additional information to determine if the activities of a Contractor constitute an unfair bidding advantage.
- 1.4 Each bidder is responsible for becoming thoroughly familiar with the Bid Documents prior to submitting a bid. The failure of a bidder to review evident site conditions, to attend available prebid conferences, or to receive, examine, or act on addenda to the Bid Documents shall not relieve that bidder from any obligation with respect to their bid or the execution of the work as a Contractor.
- 1.5 Prior to the award of the contract, General Contractor bidders or Filed Sub-bidders may be required to provide documented evidence to the Owner or the Bureau showing compliance with the provisions of this section, their business experience, financial capability, or performance on previous projects.
- 1.6 The selected General Contractor bidder will be required to provide proof of insurance before a contract can be executed.
- 1.7 Contracts developed from this bid shall not be assigned, sublet or transferred without the written consent of the Owner.
- 1.8 By submitting a bid the Contractor attests that it has not been declared ineligible to bid on State of Maine projects. The Director of the Bureau of General Services may disallow award of this contract to any Contractor if there is evidence that the Contractor or any of its Subcontractors, through their own fault, have been terminated, suspended for cause, debarred from bidding, agreed to refrain from bidding as part of a settlement, have defaulted on a contract, or had a contract completed by another party.
- 1.9 The Contractor attests that it is not presently indicted for or otherwise criminally or civilly charged by a Federal, State or local government entity with commission of any of the following offenses and has not within a three-year period preceding this bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction, or contract under a public transaction, violation of Federal or State anti-trust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

00 21 13 Instructions to Bidders

- 1.10 The Contractor shall not make any award or permit any award (subgrant or contract) at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs or State of Maine projects.
- 2. Authority of Owner
- 2.1 The Owner reserves the right to accept or reject any or all bids as may best serve the interest of the Owner.
- 2.2 Subject to the Owner's stated right to accept or reject any or all bids, the Contractor shall be selected on the basis of the lowest sum of an acceptable Base Bid plus any Alternate Bids the Owner elects to include. An acceptable bid is one from a responsive and responsible bidder.
- 3. Submitting Bids and Bid Requirements
- 3.1 Each bid shall be submitted on the forms provided in the Bid Documents.
- 3.2 Each bid shall be valid for a period of thirty calendar days following the Project bid closing date and time.
- 3.3 A bid that contains any escalation clause is considered invalid.
- 3.4 Bidders shall include a Bid Bond or other approved bid security with the bid form submitted to the Owner when the bid form indicates such bid security is required. The bond value shall be 5% of the bid amount. The form of bond is shown in section 00 43 13.
- 3.5 Bidders shall include the cost of Performance and Payment Bonds in the bid amount if the bid amount will result in a construction contract value over \$125,000, inclusive of alternate bids that may be awarded in the contract. Pursuant to 14 M.R.S.A., Section 871, Public Works Contractors' Surety Bond Law of 1971, subsection 3, the selected Contractor is required to provide these bonds before a contract can be executed. The form of bonds are shown in section 00 61 13.13 and 00 61 13.16.
- 3.6 Bidders may modify bids in writing, by the same means as the original bid submission, prior to the bid closing time. Such written amendments shall not disclose the amount of the initial bid. If so disclosed, the entire bid is considered invalid.
- 3.7 Bidders shall acknowledge on the bid form all Addenda issued in a timely manner. The Consultant shall not issue Addenda affecting the content of the bid less than 72 hours prior to the bid closing time.
- A bid may be withdrawn without penalty if a written request by the bidder is presented to the 3.8 Owner prior to the bid closing time. Such written withdrawal requests are subject to verification as required by the Bureau. After the bid closing time, such written withdrawal requests may be allowed in consideration of the bid bond or, without utilizing a bid bond, if the Contractor

00 21 13 Instructions to Bidders

provides documented evidence to the satisfaction of the Bureau that factual errors had been made on the bid form.

- 3.9 In the event State of Maine Offices unexpectedly close on the published date of a public bid opening in the location of that bid opening, prior to the time of the scheduled deadline, the new deadline for the public bid opening will be the following business day at the originally scheduled hour of the day, at the original location. Official closings are posted on the State of Maine government website.
- 3.10 The Owner may require, in a Notice of Intent to Award letter to the apparent low bidder, a Schedule of Values, Project Schedule, and List of Subcontractors and Suppliers as both a demonstration of capability of the Bidder and as a condition of award.
- 3.11 Projects which require a State of Maine wage determination will include that schedule as part of the Bid Documents. See section 00 73 46, if such rates are required.
- 3.12 Projects which require compliance with the Davis-Bacon Act are subject to the regulations contained the Code for Federal Regulations and the federal wage determination which is made a part of the Bid Documents. See section 00 73 46, if such rates are required.
- 3.13 The Owner is exempt from the payment of Maine State sales and use taxes as provided in 36 M.R.S. §1760 (1). The Contractor and Subcontractors shall not include taxes on exempt items in the construction contract.

00 41 13 Contractor Bid Form

REPAIR PAVEMENTS SOUTH PO	RTLAND AIR NATIONAL GUARDBGS project number 3249
Bid Administrator:	Alternate Bid Administrator:
Mr. Glen Tompkins Maine Air National Guard 101st Civil Engineering Squadron 106 Ashley Avenue Bldg 486 Bangor, Maine 04401	<i>Mr. Robert Gurney</i> Bureau of General Services 111 Sewall Street, Cross State Office Building, 4th floor 77 State House Station Augusta, Maine 04333-0077
glen.tompkins.1@us.af.mil	BGS.Architect@Maine.gov
Bidder:	
Signature:	
Printed name and title:	
Company name:	
Mailing address:	
City, state, zip code:	
Phone number:	
Email address:	
State of incorporation,	
List of all partners, if a partnership:	

The Bidder agrees, if the Owner offers to award the contract, to provide any and all bonds and certificates of insurance, as well as Schedule of Values, Project Schedule, and List of Subcontractors and Suppliers if required by the Owner, and to sign the designated Construction Contract within twelve calendar days after the date of notification of such acceptance, except if the twelfth day falls on a State of Maine government holiday or other closure day, or a Saturday, or a Sunday, in which case the aforementioned documents must be received before 12:00 noon on the first available business day following the holiday, other closure day, Saturday, or Sunday.

As a guarantee thereof, the Bidder submits, together with this bid, a bid bond or other acceptable instrument as and if required by the Bid Documents.

00 41 13 Contractor Bid Form

 The Bidder, having carefully examined the form of contract, general conditions, specifications and drawings dated <u>15 JULY 2021</u>, prepared by <u>101st Civil Engineering Squadron</u> for Repair Pavements South Portland ANG Project, as well as the premises and conditions relating to the work, proposes to furnish all labor, equipment and materials necessary for and reasonably incidental to the construction and completion of this project for the **Base Bid** amount of:

	S	5	.00
2.	Allowances on this project. None		\$ 0 <u>.00</u>
3.	Alternate Bids on this project. Any dollar amount line below that is left blank by the Bidder shall be \$0.00 .	e read as a bid of	

ABI# 01 Mill 1.5 inches asphalt associated with the base bid pavements shown on drawings C-101 approx 1200 SY ______.00

4. The Bidder acknowledges receipt of the following addenda to the specifications and drawings:

Addendum No.	Dated:	Addendum No	Dated:
Addendum No.	Dated:	Addendum No	Dated:
Addendum No.	Dated:	Addendum No	Dated:
Addendum No.	Dated:	Addendum No	Dated:

- 5. Bid security *is not required* on this project. If noted above as required, the Bidder shall include with this bid form a satisfactory Bid Bond (section 00 43 13) or a certified or cashier's check for 5% of the bid amount with this completed bid form submitted to the Owner.
- 6. Filed Sub-bids *not required* on this project. If noted above as required, the Bidder shall include with this bid form a list of each Filed Sub-bidder selected by the Bidder on the form provided (section 00 41 13F).

AdvantageME CT#

State of Maine CONSTRUCTION CONTRACT

Large Construction Project

This form is used when the Contract value is \$50,000 or greater. The Project Manual, Specifications and Drawings are considered part of this Contract.

Agreement entered into by and between the *insert contracting entity name* hereinafter called the *Owner* and *insert Contractor company name* hereinafter called the *Contractor*.

BGS Project No.: *insert number assigned by BGS*

Other Project No.:

For the following Project: *<u>title of project shown on documents</u> at <u><i>facility or campus name*</u>, <u>*municipality*</u>, Maine.

The Specifications and the Drawings have been prepared by *firm name*, acting as Professionalof-Record and named in the documents as the Consultant Architect or Engineer.

The *Owner* and *Contractor* agree as follows:

ARTICLE 1 COMPENSATION AND PAYMENTS

1.1 The Owner shall pay the Contractor to furnish all labor, equipment, materials and incidentals necessary for the construction of the Work described in the Specifications and shown on the Drawings the Contract Amount as shown below.

Base Bid	<u>\$0.00</u>
Alternate Bid number and name or "no Alternates"	<u>\$0.00</u>
Alternate Bid number and name or "no Alternates"	<u>\$0.00</u>
Alternate Bid number and name or "no Alternates"	<u>\$0.00</u>
Alternate Bid number and name or "no Alternates"	<u>\$0.00</u>
Alternate Bid number and name or "no Alternates"	<u>\$0.00</u>
Total Contract Amount	<u>\$0.00</u>

1.2 The Contractor's requisition shall contain sufficient detail and supporting information for the Owner to evaluate and support the payment requested.

- **1.2.1** Payments are due and payable twenty-five working days from the date of receipt of a Contractor requisition which is approved by the Owner.
- **1.2.2** Provisions for late payments are governed by 5 M.R.S. Chapter 144, *Payment of Invoices Received from Business Concerns*, and interest shall be calculated at 1% per month.

ARTICLE 2 COMMENCEMENT AND COMPLETION DATES

2.1 The Work of this Contract shall commence no sooner than the date this document is executed by the approval authority, or a subsequent date designated in the contract documents.

2.2 The Substantial Completion Date shall be <u>15 December 2023</u>.

2.3 The Work of this Contract shall be completed on or before the <u>Contract Final Completion</u> Date of <u>31 December 2023</u>.

2.4 The Contract Expiration Date shall be <u>29 February 2024</u>. (This date is the <u>Owner's</u> deadline for internal management of contract accounts. The Contract Expiration Date does not directly relate to any contract obligation of the Contractor.)

ARTICLE 3 INELIGIBLE BIDDER

3.1 By signing this contract the Contractor attests that it has not been declared ineligible to bid on State of Maine projects. The Bureau of General Services may disallow award of this contract to any Contractor if there is evidence that the Contractor or any of its Subcontractors, through their own fault, have been terminated, suspended for cause, debarred from bidding, agreed to refrain from bidding as part of a settlement, have defaulted on a contract, or had a contract completed by another party.

3.2 By signing this contract the Contractor attests that it is not presently indicted for or otherwise criminally or civilly charged by a Federal, State or local government entity with commission of any of the following offenses and has not within a three-year period preceding this bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction, or contract under a public transaction, violation of Federal or State anti-trust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

3.3 The Contractor shall not make any award or permit any award (subgrant or contract) at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs or State of Maine projects.

ARTICLE 4 CONTRACTOR'S RESPONSIBILITIES

4.1 On this project, the Contractor <u>shall</u> furnish the Owner the appropriate contract bonds in the amount of 100% of the Contract Sum. Contract bonds are mandated if the Contract Sum exceeds \$125,000, or if bonds are specifically required by the Contract Documents.

4.2 The Contractor shall comply with all laws, codes and regulations applicable to the Work.

4.3 The Contractor shall acquire all permits and third-party approvals applicable to the Work not specifically identified as provided by the Owner. Costs for Contractor-provided permits and third-party approvals shall be included in the Contract Sum identified in Section 1.1 above.

4.4 The Contractor shall remain an independent agent for the duration of this Contract, shall not become an employee of the State of Maine, and shall assure that no State employee will be compensated by, or otherwise benefit from, this Contract.

4.5 The Contractor shall be responsible for any design cost, construction cost, or other cost incurred on the Project to the extent caused by the negligent acts, errors or omissions of the Contractor or their Subcontractors in the performance of Work under this Contract.

ARTICLE 5 OWNER'S RESPONSIBILITIES

5.1 The Owner shall provide full information about the objectives, schedule, constraints and existing conditions of the project. The Owner has established a budget with reasonable contingencies that meets the project requirements.

5.2 By signing this contract, the Owner attests that all State of Maine procurement requirements for this contract have been met, including the solicitation of competitive bids.

ARTICLE 6 INSTRUMENTS OF SERVICE

6.1 The Contractor's use of the drawings, specifications and other documents known as the Consultant's Instruments of Service is limited to the execution of the Contractor's scope of work of this project unless the Contractor receives the written consent of the Owner and Consultant for use elsewhere.

ARTICLE 7 MISCELLANEOUS PROVISIONS

7.1 This Contract shall be governed by the laws of the State of Maine.

7.2 The Owner and Contractor, respectively, bind themselves, their partners, successors, assigns and legal representatives to this Contract. Neither party to this Contract shall assign the Contract as a whole without written consent of the other party, which consent the Owner may withhold without cause.

7.3 Notwithstanding any other provision of this Agreement, if the Owner does not receive sufficient funds to fund this Agreement or funds are de-appropriated, or if the Owner does not receive legal authority from the Maine State Legislature or Maine Courts to expend funds intended for this Agreement, then the Owner is not obligated to make payment under this Agreement; provided, however, the Owner shall be obligated to pay for services satisfactorily performed prior to any such non-appropriation in accordance with the termination provisions of this Agreement. The Owner shall timely notify the Contractor of any non-appropriation and the effective date of the non-appropriation.

ARTICLE 8 CONTRACT DOCUMENTS

8.1 The General Conditions of the contract, instructions to bidders, bid form, Special Provisions, the written specifications and the drawings, and any Addenda, together with this agreement, form the contract. Each element is as fully a part of the Contract as if hereto attached or herein repeated.

- 8.2 Specifications: *indicate date of issuance of project manual*
- 8.3 Drawings: *note each sheet number and title*
- 8.4 Addenda: *note each addenda number and date, or "none"*

BGS Project No.:

The Contract is effective as of the date executed by the approval authority.

OWNER

CONTRACTOR

Signature name and title Date

name of contracting entity address

Signature name and title

Date

name of contractor company address

telephone email address telephone email address Vendor Number

Indicate the names of the review and approval individuals appropriate to the approval authority.

select proper appro Reviewed by:	oval authority	Approved by:	
Signature	Date	Signature	Date
insert name		Joseph H. Ostwald	
Project Manager/	Contract Administrator	Director, Planning,	Design & Construction

BASIS OF COMPENSATION

Per § 1.2, contracts based on a not-to-exceed amount shall specify here the basis of compensation: hourly rates, or unit prices, or allowances.

Table of Contents of this General Conditions Section

1.	Preconstruction Conference	2
2.	Intent and Correlation of Contract Documents	2
3.	Additional Drawings and Specifications	3
4.	Ownership of Contract Documents	3
5.	Permits, Laws, and Regulations	3
6.	Taxes	4
7.	Labor and Wages	4
8.	Indemnification	5
9.	Insurance Requirements	5
10.	Contract Bonds	6
11.	Patents and Royalties	7
12.	Surveys, Layout of Work	7
13.	Record of Documents	7
14.	Allowances	8
15.	Shop Drawings	8
16.	Samples	8
17.	Substitutions	8
18.	Assignment of Contract	9
19.	Separate Contracts	9
20.	Subcontracts	.10
21.	Contractor-Subcontractor Relationship	.10
22.	Supervision of the Work	.11
23.	Observation of the Work	.11
24.	Consultant's Status	.12
25.	Management of the Premises	.12
26.	Safety and Security of the Premises	.13
27.	Changes in the Work	.14
28.	Correction of the Work	.15
29.	Owner's Right to do Work	.16
30.	Termination of Contract and Stop Work Action	.16
31.	Delays and Extension of Time	.17
32.	Payments to the Contractor	.18
33.	Payments Withheld	.19
34.	Liens	.19
35.	Workmanship	.19
36.	Close-out of the Work	20
37.	Date of Completion and Liquidated Damages	21
38.	Dispute Resolution	21

- 1. Preconstruction Conference
- 1.1 The Contractor shall, upon acceptance of a contract and prior to commencing work, schedule a preconstruction conference with the Owner and Consultant. The purpose of this conference is as follows.
- 1.1.1 Introduce all parties who have a significant role in the Project, including:

Owner (State agency or other contracting entity)

Owner's Representative Owner's Representative Consultant (Architect or Engineer) Subconsultants Clerk-of-the-works Contractor (GC) Superintendent Subcontractors Other State agencies Construction testing company Commissioning agent Special Inspections agent Bureau of General Services (BGS);

- 1.1.2 Review the responsibilities of each party;
- 1.1.3 Review any previously-identified special provisions of the Project;
- 1.1.4 Review the Schedule of the Work calendar submitted by the Contractor to be approved by the Owner and Consultant;
- 1.1.5 Review the Schedule of Values form submitted by the Contractor to be approved by the Owner and Consultant;
- 1.1.6 Establish routines for Shop Drawing approval, contract changes, requisitions, et cetera;
- 1.1.7 discuss jobsite issues;
- 1.1.8 Discuss Project close-out procedures;
- 1.1.9 Provide an opportunity for clarification of Contract Documents before work begins; and
- 1.1.10 Schedule regular meetings at appropriate intervals for the review of the progress of the Work.
- 2. Intent and Correlation of Contract Documents
- 2.1 The intent of the Contract Documents is to describe the complete Project. The Contract Documents consist of various components; each component complements the others. What is shown as a requirement by any one component shall be inferred as a requirement on all corresponding components.
- 2.2 The Contractor shall furnish all labor, equipment and materials, tools, transportation, insurance, services, supplies, operations and methods necessary for, and reasonably incidental to, the construction and completion of the Project. Any work that deviates from the Contract Documents which appears to be required by the exigencies of construction or by inconsistencies in the Contract Documents, will be determined by the Consultant and authorized in writing by the Consultant, Owner and the Bureau prior to execution. The Contract Documents is uncertain.
- 2.3 The Contractor shall not utilize any apparent error or omission in the Contract Documents to the disadvantage of the Owner. The Contractor shall promptly notify the Consultant in writing of such errors or omissions. The Consultant shall make any corrections or clarifications necessary in such a situation to document the true intent of the Contract Documents.

- 3. Additional Drawings and Specifications
- 3.1 Upon the written request of the Contractor, the Owner shall provide, at no expense to the Contractor, up to five sets of printed Drawings and Specifications for the execution of the Work.
- 3.2 The Consultant shall promptly furnish to the Contractor revised Drawings and Specifications, for the area of the documents where those revisions apply, when corrections or clarifications are made by the Consultant. All such information shall be consistent with, and reasonably inferred from, the Contract Documents. The Contractor shall do no work without the proper Drawings and Specifications.
- 4. Ownership of Contract Documents
- 4.1 The designs represented on the Contract Documents are the property of the Consultant. The Drawings and Specifications shall not be used on other work without consent of the Consultant.
- 5. Permits, Laws, and Regulations
- 5.1 The Owner is responsible for obtaining any zoning approvals or other similar local project approvals necessary to complete the Work, unless otherwise specified in the Contract Documents.
- 5.2 The Owner is responsible for obtaining Maine Department of Environmental Protection, Maine Department of Transportation, or other similar state government project approvals necessary to complete the Work, unless otherwise indicated in the Contract Documents.
- 5.3 The Owner is responsible for obtaining any federal agency project approvals necessary to complete the Work, unless otherwise indicated in the Contract Documents.
- 5.4 The Owner is responsible for obtaining all easements for permanent structures or permanent changes in existing facilities.
- 5.5 The Contractor is responsible for obtaining and paying for all permits and licenses necessary for the implementation of the Work. The Contractor shall notify the Owner of any delays, variance or restrictions that may result from the issuing of permits and licenses.
- 5.6 The Contractor shall comply with all ordinances, laws, rules and regulations and make all required notices bearing on the implementation of the Work. In the event the Contractor observes disagreement between the Drawings and Specifications and any ordinances, laws, rules and regulations, the Contractor shall promptly notify the Consultant in writing. Any necessary changes shall be made as provided in the contract for changes in the work. The Contractor shall not perform any work knowing it to be contrary to such ordinances, laws, rules and regulations.
- 5.7 The Contractor shall comply with local, state and federal regulations regarding construction safety and all other aspects of the Work.
- 5.8 The Contractor shall comply with the Maine Code of Fair Practices and Affirmative Action, 5 M.R.S. §784 (2).

6. Taxes

- 6.1 The Owner is exempt from the payment of Maine State sales and use taxes as provided in 36 M.R.S. §1760 (1). The Contractor and Subcontractors shall not include taxes on exempt items in the construction contract.
- 6.2 Section 1760 further provides in subsection 61 that sales to a construction contractor or its subcontractor of tangible personal property that is to be physically incorporated in, and become a permanent part of, real property for sale to or owned by the Owner, are exempt from Maine State sales and use taxes. Tangible personal property is defined in 36 M.R.S. §1752 (17).
- 6.3 The Contractor may contact Maine Revenue Services, 24 State House Station, Augusta, Maine 04333 for guidance on tax exempt regulations authorized by 36 M.R.S. §1760 and detailed in Rule 302 (18-125 CMR 302).

7. Labor and Wages

- 7.1 The Contractor shall conform to the labor laws of the State of Maine, and all other laws, ordinances, and legal requirements affecting the work in Maine.
- 7.2 The Consultant shall include a wage determination document prepared by the Maine Department of Labor in the Contract Documents for state-funded contracts in excess of \$50,000. The document shows the minimum wages required to be paid to each category of labor employed on the project.
- 7.3 On projects requiring a Maine wage determination, the Contractor shall submit monthly payroll records to the Owner ("the contracting agency") showing the name and occupation of all workers and all independent contractors employed on the project. The monthly submission must also include the Contractor's company name, the title of the project, hours worked, hourly rate or other method of remuneration, and the actual wages or other compensation paid to each person.
- 7.4 The Contractor shall not reveal, in the payroll records submitted to the Owner, personal information regarding workers and independent contractors, other than the information described above. Such information shall not include Social Security number, employee identification number, or employee address or phone number, for example.
- 7.5 The Contractor shall conform to Maine statute (39-A M.R.S. §105-A (6)) by providing to the Workers' Compensation Board a list of all subcontractors and independent contractors on the job site and a record of the entity to whom that subcontractor or independent contractor is directly contracted and by whom that subcontractor or independent contractor is insured for workers' compensation purposes.
- 7.6 The Contractor shall enforce strict discipline and good order among their employees at all times, and shall not employ any person unfit or unskilled to do the work assigned to them.
- 7.7 The Contractor shall promptly pay all employees when their compensation is due, shall promptly pay all others who have billed and are due for materials, supplies and services used in the Work, and shall promptly pay all others who have billed and are due for insurance, workers compensation coverage, federal and state unemployment compensation, and Social Security

charges pertaining to this Project. Before final payments are made, the Contractor shall furnish to the Owner affidavits that all such payments described above have been made.

- 7.8 The Contractor may contact the Maine Department of Labor, 54 State House Station, Augusta, Maine 04333 for guidance on labor issues.
- 7.9 The Contractor may contact the Maine Workers' Compensation Board, 27 State House Station, Augusta, Maine 04333 for guidance on workers' compensation issues.

8. Indemnification

- 8.1 The Contractor shall indemnify and hold harmless the Owner and its officers and employees from and against any and all damages, liabilities, and costs, including reasonable attorney's fees, and defense costs, for any and all injuries to persons or property, including claims for violation of intellectual property rights, to the extent caused by the negligent acts or omissions of the Contractor, its employees, agents, officers or subcontractors in the performance of work under this Agreement. The Contractor shall not be liable for claims to the extent caused by the negligent acts or omissions of the Owner or for actions taken in reasonable reliance on written instructions of the Owner.
- 8.2 The Contractor shall notify the Owner promptly of all claims arising out of the performance of work under this Agreement by the Contractor, its employees or agents, officers or subcontractors.
- 8.3 This indemnity provision shall survive the termination of the Agreement, completion of the project or the expiration of the term of the Agreement.

9. Insurance Requirements

- 9.1 The Contractor shall provide, with each original of the signed Contract, an insurance certificate or certificates acceptable to the Owner and BGS. The Contractor shall submit insurance certificates to the Owner and BGS at the commencement of this Contract and at policy renewal or revision dates. The certificates shall identify the project name and BGS project number, and shall name the Owner as certificate holder and as additional insured for general liability and automobile liability coverages. The submitted forms shall contain a provision that coverage afforded under the insurance policies will not be canceled or materially changed unless at least ten days prior written notice by registered letter has been given to the Owner and BGS.
- 9.2 The Owner does not warrant or represent that the insurance required herein constitutes an insurance portfolio which adequately addresses all risks faced by the Contractor or its Subcontractors. The Contractor is responsible for the existence, extent and adequacy of insurance prior to commencement of work. The Contractor shall not allow any Subcontractor to commence work until all similar insurance required of the Subcontractor has been confirmed by the Contractor.
- 9.3 The Contractor shall procure and maintain primary insurance for the duration of the Project and, if written on a Claims-Made basis, shall also procure and maintain Extended Reporting Period (ERP) insurance for the period of time that any claims could be brought. The Contractor shall ensure that all Subcontractors they engage or employ will procure and maintain similar insurance

in form and amount acceptable to the Owner and BGS. At a minimum, the insurance shall be of the types and limits set forth herein protecting the Contractor from claims which may result from the Contractor's execution of the Work, whether such execution be by the Contractor or by those employed by the Contractor or by those for whose acts they may be liable. All required insurance coverages shall be placed with carriers authorized to conduct business in the State of Maine by the Maine Bureau of Insurance.

9.3.1 The Contractor shall have Workers' Compensation insurance for all employees on the Project site in accordance with the requirements of the Workers' Compensation law of the State of Maine. Minimum acceptable limits for Employer's Liability are:

Bodily Injury by Accident	\$500,000		
Bodily Injury by Disease			
Bodily Injury by Disease			

9.3.2 The Contractor shall have Commercial General Liability insurance providing coverage for bodily injury and property damage liability for all hazards of the Project including premise and operations, products and completed operations, contractual, and personal injury liabilities. The policy shall include collapse and underground coverage as well as explosion coverage if explosion hazards exist. Aggregate limits shall apply on a location or project basis. Minimum acceptable limits are:

General aggregate limit	.\$2,000,000
Products and completed operations aggregate	
Each occurrence limit	.\$1,000,000
Personal injury aggregate	.\$1,000,000

- 9.3.3 The Contractor shall have Automobile Liability insurance against claims for bodily injury, death or property damage resulting from the maintenance, ownership or use of all owned, non-owned and hired automobiles, trucks and trailers. Minimum acceptable limit is: Any one accident or loss\$500,000
- 9.3.4 For the portion of a project which is new construction, the Contractor shall procure and maintain Builder's Risk insurance naming the Owner, Contractor, and any Subcontractor as insureds as their interest may appear. Covered causes of loss form shall be all Risks of Direct Physical Loss, endorsed to include flood, earthquake, transit and sprinkler leakage where sprinkler coverage is applicable. Unless specifically authorized in writing by the Owner, the limit of insurance shall not be less than the initial contract amount, for the portion of the project which is new construction, and coverage shall apply during the entire contract period and until the work is accepted by the Owner.
- 9.3.5 The Contractor shall have Owner's Protective Liability insurance for contract values \$50,000 and above, naming the Owner as the Named Insured. Minimum acceptable limits are: General aggregate limit......\$2,000,000 Each occurrence limit......\$1,000,000
- 10. Contract Bonds
- 10.1 When noted as required in the Bid Documents, the Contractor shall provide to the Owner a Performance Bond and a Payment Bond, or "contract bonds", upon execution of the contract. Each bond value shall be for the full amount of the contract and issued by a surety company authorized to do business in the State of Maine as approved by the Owner. The bonds shall be

executed on the forms furnished in the Bid Documents. The bonds shall allow for any subsequent additions or deductions of the contract.

- 10.2 The contract bonds shall continue in effect for one year after final acceptance of the contract to protect the Owner's interest in connection with the one year guarantee of workmanship and materials and to assure settlement of claims for the payment of all bills for labor, materials and equipment by the Contractor.
- 11. Patents and Royalties
- 11.1 The Contractor shall, for all time, secure for the Owner the free and undisputed right to the use of any patented articles or methods used in the Work. The expense of defending any suits for infringement or alleged infringement of such patents shall be borne by the Contractor. Awards made regarding patent suits shall be paid by the Contractor. The Contractor shall hold the Owner harmless regarding patent suits that may arise due to installations made by the Contractor, and to any awards made as a result of such suits.
- 11.2 Any royalty payments related to the work done by the Contractor for the Project shall be borne by the Contractor. The Contractor shall hold the Owner harmless regarding any royalty payments that may arise due to installations made by the Contractor.
- 12. Surveys, Layout of Work
- 12.1 The Owner shall furnish all property surveys unless otherwise specified.
- 12.2 The Contractor is responsible for correctly staking out the Work on the site. The Contractor shall employ a competent surveyor to position all construction on the site. The surveyor shall run the axis lines, establish correct datum points and check each line and point on the site to insure their accuracy. All such lines and points shall be carefully preserved throughout the construction.
- 12.3 The Contractor shall lay out all work from dimensions given on the Drawings. The Contractor shall take measurements and verify dimensions of any existing work that affects the Work or to which the Work is to be fitted. The Contractor is solely responsible for the accuracy of all measurements. The Contractor shall verify all grades, lines, levels, elevations and dimensions shown on the Drawings and report any errors or inconsistencies to the Consultant prior to commencing work.

13. Record of Documents

- 13.1 The Contractor shall maintain one complete set of Contract Documents on the jobsite, in good order and current status, for access by the Owner and Consultant.
- 13.2 The Contractor shall maintain, continuously updated, complete records of Requests for Information, Architectural Supplemental Instructions (or equivalent), Information Bulletins, supplemental sketches, Change Order Proposals, Change Orders, Shop Drawings, testing reports, et cetera, for access by the Owner and Consultant.

14. Allowances

- 14.1 The Contract Price shall include all allowances described in the Contract Documents. The Contractor shall include all overhead and profit necessary to implement each allowance in their Contract Price.
- 14.2 The Contractor shall not be required to employ parties for allowance work against whom the Contractor has a reasonable objection. In such a case, the Contractor shall notify the Owner in writing of their position and shall propose an alternative party to complete the work of the allowance.

15. Shop Drawings

- 15.1 The Contractor shall administer Shop Drawings prepared by the Contractor, Subcontractors, suppliers or others to conform to the approved Schedule of the Work. The Contractor shall verify all field measurements, check and authorize all Shop Drawings and schedules required by the Work. The Contractor is the responsible party and contact for the Contractor's work as well as that of Subcontractors, suppliers or others who provide Shop Drawings.
- 15.2 The Consultant shall review and acknowledge Shop Drawings, with reasonable promptness, for general conformity with the design concept of the project and compliance with the information provided in the Contract Documents.
- 15.3 The Contractor shall provide monthly updated logs containing: requests for information, information bulletins, supplemental instructions, supplemental sketches, change order proposals, change orders, submittals, testing and deficiencies.
- 15.4 The Contractor shall make any corrections required by the Consultant, and shall submit a quantity of corrected copies as may be needed. The acceptance of Shop Drawings or schedules by the Consultant shall not relieve the Contractor from responsibility for deviations from Drawings and Specifications, unless the Contractor has called such deviations to the attention of the Consultant at the time of submission and secured the Consultant's written approval. The acceptance of Shop Drawings or schedules by the Consultant does not relieve the Contractor from responsibility for errors in Shop Drawings or schedules.

16. Samples

16.1 The Contractor shall furnish for approval, with reasonable promptness, all samples as directed by the Consultant. The Consultant shall review and approve such samples, with reasonable promptness, for general conformity with the design concept of the project and compliance with the information provided in the Contract Documents. The subsequent work shall be in accord with the approved samples.

17. Substitutions

17.1 The Contractor shall furnish items and materials described in the Contract Documents. If the item or material specified describes a proprietary product, or uses the name of a manufacturer, the term "or approved equal" shall be implied, if it is not included in the text. The specific item or material specified establishes a minimum standard for the general design, level of quality, type, function, durability, efficiency, reliability, compatibility, warranty coverage, installation factors

and required maintenance. The Drawing or written Specification shall not be construed to exclude other manufacturers products of comparable design, quality, and efficiency.

- 17.2 The Contractor may submit detailed information about a proposed substitution to the Consultant for consideration. Particular models of items and particular materials which the Contractor asserts to be equal to the items and materials identified in the Contract Documents shall be allowed only with written approval by the Consultant. The request for substitution shall include a cost comparison and a reason or reasons for the substitution.
- 17.3 The Consultant may request additional information about the proposed substitution. The approval or rejection of a proposed substitution may be based on timeliness of the request, source of the information, the considerations of minimum standards described above, or other considerations. The Consultant should briefly state the rationale for the decision. The decision shall be considered final.
- 17.4 The duration of a substitution review process can not be the basis for a claim for delay in the Schedule of the Work.

18. Assignment of Contract

18.1 The Contractor shall not assign or sublet the contract as a whole without the written consent of the Owner. The Contractor shall not assign any money due to the Contractor without the written consent of the Owner.

19. Separate Contracts

- 19.1 The Owner reserves the right to create other contracts in connection with this Project using similar General Conditions. The Contractor shall allow the Owner's other contractors reasonable opportunity for the delivery and storage of materials and the execution of their work. The Contractor shall coordinate and properly connect the Work of all contractors.
- 19.2 The Contractor shall promptly report to the Consultant and Owner any apparent deficiencies in work of the Owner's other contractors that impacts the proper execution or results of the Contractor. The Contractor's failure to observe or report any deficiencies constitutes an acceptance of the Owner's other contractors work as suitable for the interface of the Contractor's work, except for latent deficiencies in the Owner's other contractors work.
- 19.3 Similarly, the Contractor shall promptly report to the Consultant and Owner any apparent deficiencies in their own work that would impact the proper execution or results of the Owner's other contractors.
- 19.4 The Contractor shall report to the Consultant and Owner any conflicts or claims for damages with the Owner's other contractors and settle such conflicts or claims for damages by mutual agreement or arbitration, if necessary, at no expense to the Owner.
- 19.5 In the event the Owner's other contractors sue the Owner regarding any damage alleged to have been caused by the Contractor, the Owner shall notify the Contractor, who shall defend such proceedings at the Contractor's expense. The Contractor shall pay or satisfy any judgment that may arise against the Owner, and pay all other costs incurred.

20. Subcontracts

- 20.1 The Contractor shall not subcontract any part of this contract without the written permission of the Owner.
- 20.2 The Contractor shall submit a complete list of named Subcontractors and material suppliers to the Consultant and Owner for approval by the Owner prior to commencing work. The Subcontractors named shall be reputable companies of recognized standing with a record of satisfactory work.
- 20.3 The Contractor shall not employ any Subcontractor or use any material until they have been approved, or where there is reason to believe the resulting work will not comply with the Contract Documents.
- 20.4 The Contractor, not the Owner, is as fully responsible for the acts and omissions of Subcontractors and of persons employed by them, as the Contractor is for the acts and omissions of persons directly or indirectly employed by the Contractor.
- 20.5 Neither the Contract Documents nor any Contractor-Subcontractor contract shall indicate, infer or create any direct contractual relationship between any Subcontractor and the Owner.
- 21. Contractor-Subcontractor Relationship
- 21.1 The Contractor shall be bound to the Subcontractor by all the obligations in the Contract Documents that bind the Contractor to the Owner.
- 21.2 The Contractor shall pay the Subcontractor, in proportion to the dollar value of the work completed and requisitioned by the Subcontractor, the approved dollar amount allowed to the Contractor no more than seven days after receipt of payment from the Owner.
- 21.3 The Contractor shall pay the Subcontractor accordingly if the Contract Documents or the subcontract provide for earlier or larger payments than described in the provision above.
- 21.4 The Contractor shall pay the Subcontractor for completed and requisitioned subcontract work, less retainage, no more than seven days after receipt of payment from the Owner for the Contractor's approved Requisition for Payment, even if the Consultant fails to certify a portion of the Requisition for Payment for a cause not the fault of the Subcontractor.
- 21.5 The Contractor shall not make a claim for liquidated damages or penalty for delay in any amount in excess of amounts that are specified by the subcontract.
- 21.6 The Contractor shall not make a claim for services rendered or materials furnished by the Subcontractor unless written notice is given by the Contractor to the Subcontractor within ten calendar days of the day in which the claim originated.
- 21.7 The Contractor shall give the Subcontractor an opportunity to present and to submit evidence in any progress conference or disputes involving subcontract work.

- 21.8 The Contractor shall pay the Subcontractor a just share of any fire insurance payment received by the Contractor.
- 21.9 The Subcontractor shall be bound to the Contractor by the terms of the Contract Documents and assumes toward the Contractor all the obligations and responsibilities that the Contractor, by those documents, assumes toward the Owner.
- 21.10 The Subcontractor shall submit applications for payment to the Contractor in such reasonable time as to enable the Contractor to apply for payment as specified.
- 21.11 The Subcontractor shall make any claims for extra cost, extensions of time or damages, to the Contractor in the manner provided in these General Conditions for like claims by the Contractor to the Owner, except that the time for the Subcontractor to make claims for extra cost is seven calendar days after the receipt of Consultant's instructions.
- 22. Supervision of the Work
- 22.1 During all stages of the Work the Contractor shall have a competent superintendent, with any necessary assistant superintendents, overseeing the project. The superintendent shall not be reassigned without the consent of the Owner unless a superintendent ceases to be employed by the Contractor due to unsatisfactory performance.
- 22.2 The superintendent represents the Contractor on the jobsite. Directives given by the Consultant or Owner to the superintendent shall be as binding as if given directly to the Contractor's main office. All important directives shall be confirmed in writing to the Contractor. The Consultant and Owner are not responsible for the acts or omissions of the superintendent or assistant superintendents.
- 22.3 The Contractor shall provide supervision of the Work equal to the industry's highest standard of care. The superintendent shall carefully study and compare all Contract Documents and promptly report any error, inconsistency or omission discovered to the Consultant. The Contractor may not necessarily be held liable for damages resulting directly from any error, inconsistency or omission in the Contract Documents or other instructions by the Consultant that was not revealed by the superintendent in a timely way.

23. Observation of the Work

- 23.1 The Contractor shall allow the Owner, the Consultant and the Bureau continuous access to the site for the purpose of observation of the progress of the work. All necessary safeguards and accommodations for such observations shall be provided by the Contractor.
- 23.2 The Contractor shall coordinate all required testing, approval or demonstration of the Work. The Contractor shall give sufficient notice to the appropriate parties of readiness for testing, inspection or examination.
- 23.3 The Contractor shall schedule inspections and obtain all required certificates of inspection for inspections by a party other than the Consultant.

- 23.4 The Consultant shall make all scheduled observations promptly, prior to the work being concealed or buried by the Contractor. If approval of the Work is required of the Consultant, the Contractor shall notify the Consultant of the construction schedule in this regard. Work concealed or buried prior to the Consultant's approval may need to be uncovered at the Contractor's expense.
- 23.5 The Consultant may order reexamination of questioned work, and, if so ordered, the work must be uncovered by the Contractor. If the work is found to conform to the Contract Documents, the Owner shall pay the expense of the reexamination and remedial work. If the work is found to not conform to the Contract Documents, the Contractor shall pay the expense, unless the defect in the work was caused by the Owner's Contractor, whose responsibility the reexamination expense becomes.
- 23.6 The Bureau shall periodically observe the Work during the course of construction and make recommendations to the Contractor or Consultant as necessary. Such recommendations shall be considered and implemented through the usual means for changes to the Work.

24. Consultant's Status

- 24.1 The Consultant represents the Owner during the construction period, and observes the work in progress on behalf of the Owner. The Consultant has authority to act on behalf of the Owner only to the extent expressly provided by the Contract Documents or otherwise demonstrated to the Contractor. The Consultant has authority to stop the work whenever such an action is necessary, in the Consultant's reasonable opinion, to ensure the proper execution of the contract.
- 24.2 The Consultant is the interpreter of the conditions of the contract and the judge of its performance. The Consultant shall favor neither the Owner nor the Contractor, but shall use the Consultant's powers under the contract to enforce faithful performance by both parties.
- 24.3 In the event of the termination of the Consultant's employment on the project prior to completion of the work, the Owner shall appoint a capable and reputable replacement. The status of the new Consultant relative to this contract shall be that of the former Consultant.

25. Management of the Premises

- 25.1 The Contractor shall place equipment and materials, and conduct activities on the premises in a manner that does not unreasonably hinder site circulation, environmental stability, or any long term effect. Likewise, the Consultant's directions shall not cause the use of premises to be impeded for the Contractor or Owner.
- 25.2 The Contractor shall not use the premises for any purpose other than that which is directly related to the scope of work. The Owner shall not use the premises for any purpose incompatible with the proposed work simultaneous to the work of the Contractor.
- 25.3 The Contractor shall enforce the Consultant's instructions regarding information posted on the premises such as signage and advertisements, as well as activities conducted on the premises such as fires, and smoking.

25.4 The Owner may occupy any part of the Project that is completed with the written consent of the Contractor, and without prejudice to any of the rights of the Owner or Contractor. Such use or occupancy shall not, in and of itself, be construed as a final acceptance of any work or materials.

26. Safety and Security of the Premises

- 26.1 The Contractor shall designate, and make known to the Consultant and the Owner, a safety officer whose duty is the prevention of accidents on the site.
- 26.2 The Contractor shall continuously maintain security on the premises and protect from unreasonable occasion of injury all people authorized to be on the job site. The Contractor shall also effectively protect the property and adjacent properties from damage or loss.
- 26.3 The Contractor shall take all necessary precautions to ensure the safety of workers and others on and adjacent to the site, abiding by applicable local, state and federal safety regulations. The Contractor shall erect and continuously maintain safeguards for the protection of workers and others, and shall post signs and other warnings regarding hazards associated with the construction process, such as protruding fasteners, moving equipment, trenches and holes, scaffolding, window, door or stair openings, and falling materials.
- 26.4 The Contractor shall restore the premises to conditions that existed prior to the start of the project at areas not intended to be altered according to the Contract Documents.
- 26.5 The Contractor shall protect existing utilities and exercise care working in the vicinity of utilities shown in the Drawings and Specifications or otherwise located by the Contractor.
- 26.6 The Contractor shall protect from damage existing trees and other significant plantings and landscape features of the site which will remain a permanent part of the site. If necessary or indicated in the Contract Documents, tree trunks shall be boxed and barriers erected to prevent damage to tree branches or roots.
- 26.7 The Contractor shall repair or replace damage to the Work caused by the Contractor's or Subcontractor's forces, including that which is reasonably protected, at the expense of the responsible party.
- 26.8 The Contractor shall not load, or allow to be loaded, any part of the Project with a force which imperils personal or structural safety. The Consultant may consult with the Contractor on such means and methods of construction, however, the ultimate responsibility lies with the Contractor.
- 26.9 The Contractor shall not jeopardize any work in place with subsequent construction activities such as blasting, drilling, excavating, cutting, patching or altering work. The Consultant must approve altering any structural components of the project. The Contractor shall supervise all construction activities carried out by others on site to ensure that the work is neatly done and in a manner that will not endanger the structure or the component parts.
- 26.10 The Contractor may act with their sole discretion in emergency situations that potentially effect health, life or serious damage to the premises or adjacent properties, to prevent such potential loss or injury. The Contractor may negotiate with the Owner for compensation for expenses due to such emergency work.

- 26.11 The Contractor and Subcontractors shall have no responsibility for the identification, discovery, presence, handling, removal or disposal of, or exposure of persons to, hazardous materials in any form at the project site. The Contractor shall avoid disruption of any hazardous materials or toxic substances at the project site and promptly notify the Owner in writing on the occasion of such a discovery.
- 26.12 The Contractor shall keep the premises free of any unsafe accumulation of waste materials caused by the work. The Contractor shall regularly keep the spaces "broom clean". See the Close-out of the Work provisions of this section regarding cleaning at the completion of the project.
- 27. Changes in the Work
- 27.1 The Contractor shall not proceed with extra work without an approved Change Order or Construction Change Directive. A Change Order which has been properly signed by all parties shall become a part of the contract.
- 27.2 A Change Order is the usual document for directing changes in the Work. In certain circumstances, however, the Owner may utilize a Construction Change Directive to direct the Contractor to perform changes in the Work that are generally consistent with the scope of the project. The Owner shall use a Construction Change Directive only when the normal process for approving changes to the Work has failed to the detriment of the Project, or when agreement on the terms of a Change Order cannot be met, or when an urgent situation requires, in the Owner's judgment, prompt action by the Contractor.
- 27.3 The Consultant shall prepare the Construction Change Directive representing a complete scope of work, with proposed Contract Price and Contract Time revisions, if any, clearly stated.
- 27.4 The Contractor shall promptly carry out a Construction Change Directive which has been signed by the Owner and the Consultant. Work thus completed by the Contractor constitutes the basis for a Change Order. Changes in the Contract Price and Contract Time shall be as defined in the Construction Change Directive unless subsequently negotiated with some other terms.
- 27.5 The method of determining the dollar value of extra work shall be by:
 - .1 an estimate of the Contractor accepted by Owner as a lump sum, or
 - .2 unit prices named in the contract or subsequently agreed upon, or
 - .3 cost plus a designated percentage, or
 - .4 cost plus a fixed fee.
- 27.6 The Contractor shall determine the dollar value of the extra work for both the lump sum and cost plus designated percentage methods so as not to exceed the following rates. The rates include all overhead and profit expenses.
 - .1 Contractor for any work performed by the Contractor's own forces, up to 20% of the cost;
 - .2 Subcontractor for work performed by Subcontractor's own forces, up to 20% of the cost;
 - .3 Contractor for work performed by Contractor's Subcontractor, up to 10% of the amount due the Subcontractor.
- 27.7 The Contractor shall keep and provide records as needed or directed for the cost plus designated percentage method. The Consultant shall review and certify the appropriate amount which

includes the Contractor's overhead and profit. The Owner shall make payments based on the Consultant's certificate.

- 27.8 Cost reflected in Change Orders shall be limited to the following: cost of materials, cost of delivery, cost of labor (including Social Security, pension, Workers' Compensation insurance, and unemployment insurance), and cost of rental of power tools and equipment. Labor cost may include a pro-ratio share of a foreman's time only in the case of an extension of contract time granted due to the Change Order.
- 27.9 Overhead reflected in Change Orders shall be limited to the following: bond premium, supervision, wages of clerks, time keepers, and watchmen, small tools, incidental expenses, general office expenses, and all other overhead expenses directly related to the Change Order.
- 27.10 The Contractor shall provide credit to the Owner for labor, materials, equipment and other costs but not overhead and profit expenses for those Change Order items that result in a net value of credit to the contract.
- 27.11 The Owner may change the scope of work of the Project without invalidating the contract. The Owner shall notify the Contractor of a change of the scope of work for the Owner's Contractors, which may affect the work of this Contractor, without invalidating the contract. Change Orders for extension of the time caused by such changes shall be developed at the time of directing the change in scope of work.
- 27.12 The Consultant may order minor changes in the Work, not involving extra cost, which is consistent with the intent of the design or project.
- 27.13 The Contractor shall immediately give written notification to the Consultant of latent conditions discovered at the site which materially differ from those represented in the Drawings or Specifications, and which may eventually result in a change in the scope of work. The Contractor shall suspend work until receiving direction from the Consultant. The Consultant shall promptly investigate the conditions and respond to the Contractor's notice with direction that avoids any unnecessary delay of the Work. The Consultant shall determine if the discovered conditions warrant a Change Order.
- 27.14 The Contractor shall, within ten calendar days of receipt of the information, give written notification to the Consultant if the Contractor claims that instructions by the Consultant will constitute extra cost not accounted for by Change Order or otherwise under the contract. The Consultant shall promptly respond to the Contractor's notice with direction that avoids any unnecessary delay of the Work. The Consultant shall determine if the Contractor's claim warrants a Change Order.
- 28. Correction of the Work
- 28.1 The Contractor shall promptly remove from the premises all work the Consultant declares is nonconforming to the contract. The Contractor shall replace the work properly at no expense to the Owner. The Contractor is also responsible for the expenses of others whose work was damaged or destroyed by such remedial work.

- 28.2 The Owner may elect to remove non-conforming work if it is not removed by the Contractor within a reasonable time, that time defined in a written notice from the Consultant. The Owner may elect to store removed non-conforming work not removed by the Contractor at the Contractor's expense. The Owner may, with ten days written notice, dispose of materials which the Contractor does not remove. The Owner may sell the materials and apply the net proceeds, after deducting all expenses, to the costs that should have been borne by the Contractor.
- 28.3 The Contractor shall remedy any defects due to faulty materials or workmanship and pay for any related damage to other work which appears within a period of one year from the date of substantial completion, and in accord with the terms of any guarantees provided in the contract. The Owner shall promptly give notice of observed defects to the Contractor and Consultant. The Consultant shall determine the status of all claimed defects. The Contractor shall perform all remedial work without unjustifiable delay in either the initial response or the corrective action.
- 28.4 The Consultant may authorize, after a reasonable notification to the Contractor, an equitable deduction from the contract amount in lieu of the Contractor correcting non-conforming or defective work.
- 29. Owner's Right to do Work
- 29.1 The Owner may, using other contractors, correct deficiencies attributable to the Contractor, or complete unfinished work. Such action shall take place only after giving the Contractor three days written notice, and provided the Consultant approves of the proposed course of action as an appropriate remedy. The Owner may then deduct the cost of the remedial work from the amount due the Contractor.
- 29.2 The Owner may act with their sole discretion when the Contractor is unable to take action in emergency situations that potentially effect health, life or serious damage to the premises or adjacent properties, to prevent such potential loss or injury. The Owner shall inform the Contractor of the emergency work performed, particularly where it may affect the work of the Contractor.
- 30. Termination of Contract and Stop Work Action
- 30.1 The Owner may, owing to a certificate of the Consultant indicating that sufficient cause exists to justify such action, without prejudice to any other right or remedy and after giving the Contractor and the Contractor's surety seven days written notice, terminate the employment of the Contractor. At that time the Owner may take possession of the premises and of all materials,

tools and appliances on the premises and finish the work by whatever method the Owner may deem expedient. Cause for such action by the Owner includes:

- .1 the contractor is adjudged bankrupt, or makes a general assignment for the benefit of its creditors, or
- .2 a receiver is appointed due to the Contractor's insolvency, or
- .3 the Contractor persistently or repeatedly refuses or fails to provide enough properly skilled workers or proper materials, or
- .4 the Contractor fails to make prompt payment to Subcontractors or suppliers of materials or labor, or
- .5 the Contractor persistently disregards laws, ordinances or the instructions of the Consultant, or is otherwise found guilty of a substantial violation of a provision of the Contract Documents.
- 30.2 The Contractor is not entitled, as a consequence of the termination of the employment of the Contractor as described above, to receive any further payment until the Work is finished. If the unpaid balance of the contract amount exceeds the expense of finishing the Work, including compensation for additional architectural, managerial and administrative services, such balance shall be paid to the Contractor. If the expense of finishing the Work exceeds the unpaid balance, the Contractor shall pay the difference to the Owner. The Consultant shall certify the expense incurred by the Contractor's default. This obligation for payment shall continue to exist after termination of the contract.
- 30.3 The Contractor may, if the Work is stopped by order of any court or other public authority for a period of thirty consecutive days, and through no act or fault of the Contractor or of anyone employed by the Contractor, with seven days written notice to the Owner and the Consultant, terminate this contract. The Contractor may then recover from the Owner payment for all work executed, any proven loss and reasonable profit and damage.
- 30.4 The Contractor may, if the Consultant fails to issue a certificate for payment within seven days after the Contractor's formal request for payment, through no fault of the Contractor, or if the Owner fails to pay to the Contractor within 30 days after submission of any sum certified by the Consultant, with seven days written notice to the Owner and the Consultant, stop the Work or terminate this Contract.
- 31. Delays and Extension of Time
- 31.1 The completion date of the contract shall be extended if the work is delayed by changes ordered in the work which have approved time extensions, or by an act or neglect of the Owner, the Consultant, or the Owner's Contractor, or by strikes, lockouts, fire, flooding, unusual delay in transportation, unavoidable casualties, or by other causes beyond the Contractor's control. The Consultant shall determine the status of all claimed causes.
- 31.2 The contract shall not be extended for delay occurring more than seven calendar days before the Contractor's claim made in writing to the Consultant. In case of a continuing cause of delay, only one claim is necessary.
- 31.3 The contract shall not be extended due to failure of the Consultant to furnish drawings if no schedule or agreement is made between the Contractor and the Consultant indicating the dates

which drawings shall be furnished and fourteen calendar days has passed after said date for such drawings.

31.4 This article does not exclude the recovery of damages for delay by either party under other provisions in the Contract Document.

32. Payments to the Contractor

- 32.1 As noted under *Preconstruction Conference* in this section, the Contractor shall submit a Schedule of Values form, before the first application for payment, for approval by the Owner and Consultant. The Consultant may direct the Contractor to provide evidence that supports the correctness of the form. The approved Schedule of Values shall be used as a basis for payments.
- 32.2 The Contractor shall submit an application for each payment ("Requisition for Payment") on a form approved by the Owner and Consultant. The Consultant may require receipts or other documents showing the Contractor's payments for materials and labor, including payments to Subcontractors.
- 32.3 The Contractor shall submit Requisitions for Payment as the work progresses not more frequently than once each month, unless the Owner approves a more frequent interval due to unusual circumstances. The Requisition for Payment is based on the proportionate quantities of the various classes of work completed or incorporated in the Work, in agreement with the actual progress of the Work and the dollar value indicated in the Schedule of Values.
- 32.4 The Consultant shall verify and certify each Requisition for Payment which appears to be complete and correct prior to payment being made by the Owner. The Consultant may certify an appropriate amount for materials not incorporated in the Work which have been delivered and suitably stored at the site. The Contractor shall submit bills of sale, insurance certificates, or other such documents that will adequately protect the Owner's interests prior to payments being certified.
- 32.5 In the event any materials delivered but not yet incorporated in the Work have been included in a certified Requisition for Payment with payment made, and said materials thereafter are damaged, deteriorated or destroyed, or for any reason whatsoever become unsuitable or unavailable for use in the Work, the full amount previously allowed shall be deducted from subsequent payments unless the Contractor satisfactorily replaces said material.
- 32.6 The Contractor may request certification of an appropriate dollar amount for materials not incorporated in the Work which have been delivered and suitably stored away from the site. The Contractor shall submit bills of sale, insurance certificates, right-of-entry documents or other such documents that will adequately protect the Owner's interests. The Consultant shall determine if the Contractor's documentation for the materials is complete and specifically designated for the Project. The Owner may allow certification of such payments.
- 32.7 Subcontractors may request, and shall receive from the Consultant, copies of approved Requisitions for Payment showing the amounts certified in the Schedule of Values.
- 32.8 Certified Requisitions for Payment, payments made to the Contractor, or partial or entire occupancy of the project by the Owner shall not constitute an acceptance of any work that does

not conform to the Contract Documents. The making and acceptance of the final payment constitutes a waiver of all claims by the Owner, other than those arising from unsettled liens, from faulty work or materials appearing within one year from final payment or from requirements of the Drawings and Specifications, and of all claims by the Contractor, except those previously made and still unsettled.

33. Payments Withheld

- 33.1 The Owner shall retain five percent of each payment due the Contractor as part security for the fulfillment of the contract by the Contractor. The Owner may make payment of a portion of this "retainage" to the Contractor temporarily or permanently during the progress of the Work. The Owner may thereafter withhold further payments until the full amount of the five percent is reestablished. The Contractor may deposit with the Maine State Treasurer certain securities in place of retainage amounts due according to Maine Statute (5 M.R.S. §1746).
- 33.2 The Consultant may withhold or nullify the whole or a portion of any Requisitions for Payment submitted by the Contractor in the amount that may be necessary, in his reasonable opinion, to protect the Owner from loss due to any of the following:
 - .1 defective work not remedied;
 - .2 claims filed or reasonable evidence indicating probable filing of claims;
 - .3 failure to make payments properly to Subcontractors or suppliers;
 - .4 a reasonable doubt that the contract can be completed for the balance then unpaid;
 - .5 liability for damage to another contractor.

The Owner shall make payment to the Contractor, in the amount withheld, when the above circumstances are removed.

34. Liens

- 34.1 The Contractor shall deliver to the Owner a complete release of all liens arising out of this contract before the final payment or any part of the retainage payment is released. The Contractor shall provide with the release of liens an affidavit asserting each release includes all labor and materials for which a lien could be filed. Alternately, the Contractor, in the event any Subcontractor or supplier refuses to furnish a release of lien in full, may furnish a bond satisfactory to the Owner, to indemnify the Owner against any lien.
- 34.2 In the event any lien remains unsatisfied after all payments to the Contractor are made by the Owner, the Contractor shall refund to the Owner all money that the latter may be compelled to pay in discharging such lien, including all cost and reasonable attorney's fees.

35. Workmanship

35.1 The Contractor shall provide materials, equipment, and installed work equal to or better than the quality specified in the Contract Documents and approved in submittal and sample. The installation methods shall be of the highest standards, and the best obtainable from the respective trades. The Consultant's decision on the quality of work shall be final.

- 35.2 The Contractor shall know local labor conditions for skilled and unskilled labor in order to apply the labor appropriately to the Work. All labor shall be performed by individuals well skilled in their respective trades.
- 35.3 The Contractor shall perform all cutting, fitting, patching and placing of work in such a manner to allow subsequent work to fit properly, whether that be by the Contractor, the Owner's Contractors or others. The Owner and Consultant may advise the Contractor regarding such subsequent work. Notwithstanding the notification or knowledge of such subsequent work, the Contractor may be directed to comply with this standard of compatible construction by the Consultant at the Contractor's expense.
- 35.4 The Contractor shall request clarification or revision of any design work by the Consultant, prior to commencing that work, in a circumstance where the Contractor believes the work cannot feasibly be completed at the highest quality, or as indicated in the Contract Documents. The Consultant shall respond to such requests in a timely way, providing clarifying information, a feasible revision, or instruction allowing a reduced quality of work. The Contractor shall follow the direction of the Consultant regarding the required request for information.
- 35.5 The Contractor shall guarantee the Work against any defects in workmanship and materials for a period of one year commencing with the date of the Certificate of Substantial Completion, unless specified otherwise for specific elements of the project. The Work may also be subdivided in mutually agreed upon components, each defined by a separate Certificate of Substantial Completion.

36. Close-out of the Work

- 36.1 The Contractor shall remove from the premises all waste materials caused by the work. The Contractor shall make the spaces "broom clean" unless a more thorough cleaning is specified. The Contractor shall clean all windows and glass immediately prior to the final inspection, unless otherwise directed.
- 36.2 The Owner may conduct the cleaning of the premises where the Contractor, duly notified by the Consultant, fails to adequately complete the task. The expense of this cleaning may be deducted from the sum due to the Contractor.
- 36.3 The Contractor shall participate in all final inspections and acknowledge the documentation of unsatisfactory work, customarily called the "punch list", to be corrected by the Contractor. The Consultant shall document the successful completion of the Work in a dated Certificate of Substantial Completion, to be signed by Owner, Consultant, and Contractor.
- 36.4 The Contractor shall not call for final inspection of any portion of the Work that is not completely and permanently installed. The Contractor may be found liable for the expenses of individuals called to final inspection meetings prematurely.
- 36.5 The Contractor and all major Subcontractors shall participate in the end-of-warranty-period conference, typically scheduled close to one year after the Substantial Completion date.

- 37. Date of Completion and Liquidated Damages
- 37.1 The Contractor may make a written request to the Owner for an extension or reduction of time, if necessary. The request shall include the reasons the Contractor believes justifies the proposed completion date. The Owner may grant the revision of the contract completion date if the Work was delayed due to conditions beyond the control and the responsibility of the Contractor. The Contractor shall not conduct unauthorized accelerated work or file delay claims to recover alleged damages for unauthorized early completion.
- 37.2 The Contractor shall vigorously pursue the completion of the Work and notify the Owner of any factors that have, may, or will affect the approved Schedule of the Work. The Contractor may be found responsible for expenses of the Owner or Consultant if the Contractor fails to make notification of project delays.
- 37.3 The Project is planned to be done in an orderly fashion which allows for an iterative submittal review process, construction administration including minor changes in the Work and some bad weather. The Contractor shall not file delay claims to recover alleged damages on work the Consultant determines has followed the expected rate of progress.
- 37.4 The Consultant shall prepare the Certificate of Substantial Completion which, when signed by the Owner and the Contractor, documents the date of Substantial Completion of the Work or a designated portion of the Work. The Owner shall not consider the issuance of a Certificate of Occupancy by an outside authority a prerequisite for Substantial Completion if the Certificate of Occupancy cannot be obtained due to factors beyond the Contractor's control.
- 37.5 Liquidated Damages may be deducted from the sum due to the Contractor for each calendar day that the Work remains uncompleted after the completion date specified in the Contract or an approved amended completion date. The dollar amount per day shall be calculated using the Schedule of Liquidated Damages table shown below.

If the original contract amount is:	The per day Liquidated Damages shall be:
Less than \$100,000	\$250
\$100,000 to less than \$2,000,000	\$750
\$2,000,000 to less than \$10,000,000	\$1,500
\$10,000,000 and greater	\$1,500 plus \$250 for
	each \$2,000,000 over \$10,000,000

38. Dispute Resolution

38.1 Mediation

- 38.1.1 A dispute between the parties which arises under this Contract which cannot be resolved through informal negotiation, shall be submitted to a neutral mediator jointly selected by the parties.
- 38.1.2 Either party may file suit before or during mediation if the party, in good faith, deems it to be necessary to avoid losing the right to sue due to a statute of limitations. If suit is filed before good faith mediation efforts are completed, the party filing suit shall agree to stay all proceedings in the lawsuit pending completion of the mediation process, provided such stay is without prejudice.

38.1.3 In any mediation between the Owner and the Consultant, the Owner has the right to consolidate related claims between Owner and Contractor.

38.2 Arbitration

- 38.2.1 If the dispute is not resolved through mediation, the dispute shall be settled by arbitration. The arbitration shall be conducted before a panel of three arbitrators. Each party shall select one arbitrator; the third arbitrator shall be appointed by the arbitrators selected by the parties. The arbitration shall be conducted in accordance with the Maine Uniform Arbitration Act (MUAA), except as otherwise provided in this section.
- 38.2.2 The decision of the arbitrators shall be final and binding upon all parties. The decision may be entered in court as provided in the MUAA.
- 38.2.3 The costs of the arbitration, including the arbitrators' fees shall be borne equally by the parties to the arbitration, unless the arbitrator orders otherwise.
- 38.2.4 In any arbitration between the Owner and the Consultant, the Owner has the right to consolidate related claims between Owner and Contractor.

- 1. GENERAL. Work performed under this contract is incident to the implementation of a Federal program with the State. Accordingly, this State contract shall be governed by, and construed according to below listed Federal law(s) as they may affect the rights, remedies, and obligations of the United States. Federal agencies are permitted to require changes, remedies, changed conditions, access to records retention, suspension of work, and other clauses required by the Office of Procurement Policy.
 - a. Administrative, contractual or legal remedies in instances where Contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate.
 - b. Termination for cause and for convenience by the grantee (State of Maine) including the manner by which it will be effected and the basis for settlement [All contracts in excess of \$10,000].
 - c. Notice of awarding agency requirements and regulations pertaining to reporting.
 - d. Notice of awarding agency requirements and regulations pertaining to patent

rights with respect to any discovery or invention which arises or is developed in the course of or under this contract.

- e. Awarding agency requirements pertaining to copyrights and rights in data.
- f. Access by the grantee, the subgrantee, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purpose of making audit, examination, excerpts, and transcriptions.
- g. Retention of all required records for three years after grantees or subgrantees make final payments and all other pending matters are closed.
- EQUAL OPPORTUNITY. Contractors shall comply with Executive Order 11246 of September, 24, 1965 entitled "Equal Opportunity," as amended by Executive Order 11375 of October 13, 1967 and as supplemented by in Department of Labor Regulations [41 CFR Part 60]. [All contracts in excess of \$10,000 by grantees and their contractor or subgrantees].
- 3. COPELAND "ANTIKICKBACK" ACT. Contractors shall comply with the provisions of the Copeland "Antikickback" Act [18 U.S.C. 874] as supplemented in Department of Labor Regulations [29 CFR Part 3]. [All contracts for construction or repair.]
- 4. DAVIS-BACON ACT. The Contractor shall comply with the Davis-Bacon Act (40 U.S.C. 276a to a-7) as supplemented by U.S. Department of Labor Regulations (29 CFR Part 5). All rulings and interpretations of the Davis-Bacon Acts contained in 29 CFR Part 5 are incorporated by reference in this contract. This provision applicies to all contracts excess of \$2,000 when required by Federal program grant legislation. The applicable Davis-Bacon Wage Rate [when applicable] is included in Section 00

73 46, Wage Rates. When not applicable, a State of Maine Wage determination may be substituted in Section 00 73 46, Wage Rates. In cases where the Davis-Bacon wage determination is applicable, the State Wage Rate will not be used.

5. CONTRACT WORK HOURS. The Contractor shall comply with sections 103 and 107 of the Contract Work Hours and Safety Standards Act [40 U.S.C. 327-330] as supplemented by Department of Labor Regulations [29 CFR Part 5]. [Construction contracts in excess of \$2,000, and in excess of \$2,500 dollars for other contracts which involve the employment of mechanics or laborers.]

6. ENVIRONMENTAL PROTECTION.

- a. CLEAN AIR ACT. The Contractor shall comply with all applicable standards, orders, or requirements issued under Sections 114 and 306 of the Clean Air Act [42 U.S.C 18579(h)]. [Contracts, subcontracts, and subgrants of amounts in excess of \$100,000.]
- b. CLEAN WATER ACT. The Contractor shall comply with all applicable standards, orders, or requirements issued under section 508 of the Clean Water Act [33 U.S.C. 1368], Executive Order 11738, Environmental Protection Agency regulations [40 CFR Part 15], and section 308 of the Federal Water Pollution Control Act (33U.S.C. 1318), that relate generally to inspection, monitoring, entry reports, and information, and with all regulations and guidelines issued thereunder. [Contracts, subcontracts, and subgrants of amounts in excess of \$100,000.]
- c. RELATED ENVIRONMENTAL LAWS. The Contractor shall comply with all applicable standards, orders, or requirements issued under the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA); the National Environmental Policy Act (NEPA); and any applicable Federal, Contractor or Local environmental regulation.
- d. VIOLATING FACILITIES. The Contractor shall insure that no facility used in his/her performance under this contract is listed on the Environmental Protection Agency (EPA) list of violating facilities pursuant to 40 CFR Part 15 without the concurrence of state. The Contractor/Vendor shall notify State of the receipt of any communication from EPA indicating that a facility to be or being used in his/her performance under this contract is under consideration for listing on the EPA list of violating facilities.
- 7. ENERGY POLICY AND CONSERVATION ACT. The Contractor shall comply with mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act [Pub Law 94-163].

- 8. NONDISCRIMINATION. The Contractor shall ensure that no person is denied benefits of, or otherwise be subjected to discrimination in connection with the Contractor's performance under this agreement, on the ground of race, religion, color, national origin, sex and handicap. Accordingly, and to the extent applicable, the Contractor/Vendor covenants and agrees to the comply with the following:
 - a. Title VII or the Civil Rights Act of 1964 (42 U.S.C, Art 2000d et seq.), and DOD Regulations (32 CFR Part 300) issued thereunder;
 - b. Executive Order 11246 and Department of Labor regulations issued thereunder (41 CFR Part 60);
 - c. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. Art 794) and DOD Regulations issued thereunder (32 CFR Part 56); and,
 - d. The Age Discrimination Act of 1975 (42 U.S.C. Art 61601 et seq.) and regulations issued thereunder (45 CFR Part 90).
- 9. LOBBYING.
 - a. The Contractor will not expend any funds appropriated by Congress to pay any person for influencing or attempting to influence an officer or employee of any agency, or a Member of Congress in connection with any of the following covered federal actions; the awarding of any Federal contract; the making of any federal grant; the making of any federal loan; the entering into any cooperative agreement; and, the extension , continuation , renewal, amendment, or modification of any Federal contract, grant loan, or cooperative agreement.
 - b. The Interim Final Rule, New Restrictions on Lobbying, issued by the Office of Management and Budget and the Department of Defense (32 CFR Part 28) to implement the provisions of section 319 of Public Law 101-121 (31 U.S.C., Art 1352) is incorporated by reference.

10. DRUG FREE WORK PLACE.

- a. The Contractor will comply with the provisions of the drug-free Work Place Act of 1988 (Public Law 100-690, title V, subtitle D; 41 U.S.C. 701 et seq.) and maintain a drug-free workplace.
- b. The Final Rule, Government-wide Requirements for Drug-Free Workplace (Grants), issued by the Office of Management and budget and the department of Defense (32 CFR Part 28, Subpart f) to implement the provisions of the Drug-Free Work Place Act of 1988 is incorporated by reference and the Contractor/Vendor covenants and agrees to comply with all the provisions thereof, including any amendments to the Final Rule that may hereafter be issued.

11. TOBACCO-FREE WORKPLACE POLICY

a. The Tobacco-Free Workplace Policy, is clearly stated below:

The use of tobacco products is prohibited within the boundaries of all federal and state workplaces, including all buildings, facilities, indoor and outdoor spaces and the surrounding grounds owned, managed, or inhabited by the Department of Defense, Veterans and Emergency Management. This policy applies to parking lots, walkways, vehicles, aircraft, and also to privately owned vehicles that are parked or operated on our properties. For illustrative purposes of this policy, tobacco is defined as any type of tobacco product to include, but not limited to: cigarettes, cigars, cigarillos, electronic cigarettes, pipes, bide, hookahs, smokeless, spit tobacco or snuff.

12. USE OF UNITED STATES FLAG VESSELS.

- a. To use privately-owned United States flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) of any equipment, materials, or commodities that are both (1) procured, contracted for, or otherwise obtained with funds made available by State under this contract, and (2) transported by ocean vessel, to the extent such vessels are available at fair and reasonable rates;
- b. To furnish within 20 working days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a) above to both State and to the division of National Cargo, Office of Market Development, U.S. Maritime Administration, Washington, D.C. 20590; and,
- c. Subject to existing contracts, to insert the substance of the provisions of this section in all contracts issued pursuant to this to contract, and to cause such provisions to be inserted in all subcontracts issued pursuant to this contract, where the contract or subcontract is for \$100,000 or more and where there is a possibility of ocean transportation of procured equipment or materials.

13. DEBARMENT AND SUSPENSION.

- a. The Contractor shall not make any award or permit any award (subgrant or contract) at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs under Executive Order 12549, "Debarment and Suspension".
- b. The Final Rule, Government wide Debarment and Suspension (Nonprocurement), issued by the office of management and budget and the Department of Defense (32 CFR Part 25) to implement the provisions of executive order 12549, "Debarment and Suspension" is incorporated by reference and the

contractor/vendor covenants and agrees to comply with all the provisions thereof, including any amendments to the final rule that may hereafter be issued.

- 14. UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION POLICIES. The Contractor/Vendor covenants and agrees that he/she will comply with the provisions of the uniform relocation assistance and real property acquisition policies act of 1970 (42 U.S.C. 4601 et seq.) and regulations issued thereunder (49 CFR Part 24).11
- 15. BUY AMERICAN ACT. The Contractor will not expend any funds appropriated by Congress without complying with The Buy American Act (41 U.S.C. 10). The Buy American Act gives preference to domestic end products and domestic construction material. In addition, the Memorandum of Understanding between the United States of America and the European Economic Community on Government Procurement, and the North American Free Trade Agreement (NAFTA), provide that EC and NAFTA end products and Construction materials are exempted from application of the Buy American Act.

16. SAFETY DATA SHEET REQUIREMENTS

The contractor shall provide a list any hazardous material that requires a Safety Data Sheet (SDS). If hazardous materials will be stored onsite then the contractor shall keep SDS's available onsite and train personnel that may be exposed to the chemicals any hazards and how to understand the info in the SDS. This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

17. SUSTAINABLE PROCUREMENT REQUIREMENTS (for projects less than \$100,000)

Contractors shall ensure purchased products meet Federal sustainable procurement requirements of 40 CFR 247 and State sustainable procurement preferences in accordance with the following:

A. Any purchase of the 61 product types listed below must meet the minimum recycled/recovered content standards given in the U.S. EPA CPG.
 Visit <u>https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program</u> for a complete list of designated products and the associated recommended content levels.

Category	Product			
Paper and Paper	Paper and Paper Products			
Vehicular	Engine Coolants			
	Rebuilt Vehicular Parts			

	Re-refined Lubricating Oils			
	Retread Tires			
Construction	Building Insulation Products			
Construction				
	Carpet Cushion			
	Cement and Concrete Containing Coal Fly Ash			
	Ground Granulated Blast Furnace Slag			
	Cenospheres or Silica Fume			
	Consolidated and Reprocessed Latex Paint			
	Floor Tiles			
	Flowable Fill			
	Laminated Paperboard			
	Modular Threshold Ramps			
	Nonpressure Pipe			
	Patio Blocks			
	Polyester Carpet			
	Railroad Grade Crossing Surfaces			
	Roofing Materials			
	Shower / Restroom Dividers			
	Structural Fiberboard / Ceiling Tiles			
Transportation	Channelizers			
I	Delineators			
	Flexible Delineators			
	Parking Stops			
	Traffic Barricades			
	Traffic Cones			
Park and Recreation	Park Benches and Picnic Tables			
	Plastic Fencing			
	Playground Equipment			
	Playground Surfaces			
	Running Tracks			
Landscaping	Food Waste Compost			
Lanuscaping	Garden and Soaker Hoses			
	Hydraulic Mulch			
	Lawn and Garden Edging			
	Plastic Lumber Landscaping Timbers and Posts			
Nonnonor	Yard Trimmings Compost			
Nonpaper Office	Binders (plastic covered, chipboard, and			
	pressboard)			
	Office Furniture			
	Office Recycling Containers			
	Office Waste Receptacles			
	Plastic Binders			
	Plastic Clipboards			
	Plastic File Folders			
	Plastic Clip Portfolios			
	Plastic Presentation Folders			
	Plastic Desktop Accessories			

	Plastic Trash Bags			
	Printer Ribbons			
	Toner Cartridges			
Miscellaneous	Awards and Plaques			
	Bike Racks			
	Blasting Grit			
	Industrial Drums			
	Manual-Grade Strapping			
	Mats			
	Pallets			
	Signage			
	Sorbents			

B. Exceptions

Exceptions to CPG procurement requirement given in Paragraph (A), above, may be granted based on cost, availability, and performance. Any exceptions for an individual item or group of like items must be documented.

C. Documentation

- 1. Contractor must certify that the percentage of recovered materials to be used in the performance of the contract either meet or exceed the applicable CPG specifications or are exempted due for cost, availability, performances or other contractual requirements.
- 2. Any exceptions for an individual item or group of like items must be documented.
- 3. The certification and documentation described in Paragraphs (C)(1) and (2), above, must be updated during performance of the contract and delivered to the Owner on the attached <u>Sustainable Procurement Project Tracking Form</u> (<\$100,000) as part of Closeout Documentation.
- 4. The Contract Administrator must retain the documentation listed in Paragraphs (C)(1) and (2), above, as part of the contract/project file.
- D. State Procurement Preference

The State of Maine's procurement preferences include, but are not limited to: Energy-efficient (ENERGY STAR® or Federal Energy Management Program (FEMP) designated); Water-efficient (WaterSense); Biobased products designated by USDA; Environmentally preferable (e.g., EPEAT®-registered, or non-toxic or less toxic alternatives); Non-ozone depleting; and Recycled content materials not addresses in the EPA-designated Comprehensive Procurement Guidelines (CPG) products. If products being evaluated qualify for multiple and/or dissimilar sustainable procurement categories, the selection preference should be based on the contractor's best professional judgement as to which product best meets sustainability and project objectives. Exceptions to the State's sustainable procurement preference may be granted based on cost, availability, or performance.

Sustainable Procurement Project Tracking Form (Projects less than \$100,000)

Project Name:	Project No.:
Project Location:	Date:

As required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. <u>6962(c)(3)(A)(i)</u>), the undersigned Responsible Corporate Officer / Individual certifies that the percentage of recovered materials content for EPA-designated items to be delivered or used in the performance of the contract will be at least the amount required by the applicable contract specifications or other contractual requirements.

Date:

Signature

Printed Name

<u>EPA-Designated CPG</u> <u>Material Purchase</u> <u>Exemptions</u>	<u>Cost</u>	<u>Availability</u>	<u>Performance</u>

17. SUSTAINABLE PROCUREMENT REQUIREMENTS (for projects equal to or more than \$100,000)

Contractors shall ensure purchased products meet Federal sustainable procurement requirements of 40 CFR 247 and State sustainable procurement preferences in accordance with the following:

A. Any purchase of the 61 product types listed below must meet the minimum recycled/recovered content standards given in the U.S. EPA CPG.
 Visit <u>https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program</u> for a complete list of designated products and the associated recommended content levels.

Category	Product			
Paper and Paper	Paper and Paper Products			
Vehicular	Engine Coolants			
	Rebuilt Vehicular Parts			
	Re-refined Lubricating Oils			
	Retread Tires			
Construction	Building Insulation Products			
	Carpet Cushion			
	Cement and Concrete Containing Coal Fly Ash			
	Ground Granulated Blast Furnace Slag			
	Cenospheres, or Silica Fume			
	Consolidated and Reprocessed Latex Paint			
	Floor Tiles			
	Flowable Fill			
	Laminated Paperboard			
	Modular Threshold Ramps			
	Nonpressure Pipe			
	Patio Blocks			
	Polyester Carpet			
	Railroad Grade Crossing Surfaces			
	Roofing Materials			
	Shower / Restroom Dividers			
	Structural Fiberboard / Ceiling Tiles			
Transportation	Channelizers			
	Delineators			
	Flexible Delineators			
	Parking Stops			
	Traffic Barricades			
	Traffic Cones			
Park and Recreation	Park Benches and Picnic Tables			
	Plastic Fencing			
	Playground Equipment			

	Playground Surfaces	
	Running Tracks	
Landscaping	Food Waste Compost	
Zandoodping	Garden and Soaker Hoses	
	Hydraulic Mulch	
	Lawn and Garden Edging	
	Plastic Lumber Landscaping Timbers and Posts	
	Yard Trimmings Compost	
Nonpaper Office	Binders (plastic covered, chipboard, and	
	pressboard)	
	Office Furniture	
	Office Recycling Containers	
	Office Waste Receptacles	
	Plastic Binders	
	Plastic Clipboards	
	Plastic File Folders	
	Plastic Clip Portfolios	
	Plastic Presentation Folders	
	Plastic Desktop Accessories	
	Plastic Envelopes	
	Plastic Trash Bags	
	Printer Ribbons	
	Toner Cartridges	
Miscellaneous	Awards and Plaques	
Miccollanoodo	Bike Racks	
	Blasting Grit	
	Industrial Drums	
	Manual-Grade Strapping	
	Mats	
	Pallets	
	Signage	
	Sorbents	
	Consolito	

B. Exceptions

Exceptions to CPG procurement requirement given in Paragraph (A), above, may be granted based on cost, availability, and performance. Any exceptions for an individual item or group of like items must be documented.

C. Documentation

1. Contractor must certify that the percentage of recovered materials to be used in the performance of the contract either meet or exceed the

applicable CPG specifications or are exempted due for cost, availability, performances or other contractual requirements.

- 2. Any exceptions for an individual item or group of like items must be documented.
- 3. Estimate of Percentage of Recovered Material Content for EPA-Designated Items:
 - a. Definitions. As used in this clause-
 - "Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material."
 - ii. "Recovered material" means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.
 - b. The Contractor, on completion of this contract, shall estimate the percentage of the total recovered material content for EPA-designated item(s) delivered and/or used in contract performance, including, if applicable, the percentage of post-consumer material content.
- The certification and documentation described in Paragraphs (C)(1) (3), above, must be updated during performance of the contract and delivered to the Owner on the attached <u>Sustainable Procurement Project Tracking Form (>\$100,000)</u> as part of Closeout Documentation.
- 5. The Contract Administrator must retain the documentation listed in Paragraphs C (1) (3), above, as part of the contract/project file.
- D. State Procurement Preference

The State of Maine's procurement preferences include, but are not limited to: Energy-efficient (ENERGY STAR® or Federal Energy Management Program (FEMP) designated); Water-efficient (WaterSense); Biobased products designated by USDA; Environmentally preferable (e.g., EPEAT®-registered, or non-toxic or less toxic alternatives); Non-ozone depleting; and Recycled content materials not addresses in the EPA-designated Comprehensive Procurement Guidelines (CPG) products. If products being evaluated qualify for multiple and/or dissimilar

sustainable procurement categories, the selection preference should be based on the contractor's best professional judgement as to which product best meets sustainability and project objectives. Exceptions to the State's sustainable procurement preference may be granted based on cost, availability, or performance.

<u>Sustainable Procurement Project Tracking Form</u> (Projects equal to or greater than \$100,000)

Project Name:	Project No.:
Project Location:	Date:

As required by the Resource Conservation and Recovery Act of 1976 (42 U.S.C. <u>6962(c)(3)(A)(i)</u>), the undersigned Responsible Corporate Officer / Individual certifies that the percentage of recovered materials content for EPA-designated items to be delivered or used in the performance of the contract will be at least the amount required by the applicable contract specifications or other contractual requirements.

Signature

Printed Name

EPA-Designated CPG Material Purchased	<u>Estimated Percentage of</u> <u>Recovered Content</u>	<u>Applicable</u> <u>Exception:</u> <u>Cost, Availability or</u> <u>Performance</u>

END OF SECTION

00 73 46 Wage Determination Schedule

PART 1- GENERAL

1.1 Related Documents

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specifications Sections, apply to this Section.

1.2 Summary

A. This Section includes the wage determination requirements for Contractors as issued by the State of Maine Department of Labor Bureau of Labor Standards or the United States Department of Labor.

1.3 Requirements

A. Conform to the wage determination schedule for this project which is shown on the following page.

PART 2 - PRODUCTS (not used)

PART 3 - EXECUTION (not used)

THIS DOCUMENT MUST BE CLEARLY POSTED AT ALL CONSTRUCTION SITES FUNDED IN PART WITH STATE FUNDS

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.

2021 Fair Minimum Wage Rates Highway & Earth Cumberland County

	Minimum	Minimum			Minimum	Minimum	
Occupation Title	Wage	Benefit	Total	Occupation Title	Wage	Benefit	Total
Asphalt Raker	\$ 19.80	\$ 1.01	\$ 20.81	Ironworker - Reinforcing	\$ 28.36	\$ 0.00	\$ 28.36
Backhoe Loader Operator	\$ 25.46	\$ 4.33	\$ 29.79	Laborer - Skilled	\$ 20.61	\$ 2.19	\$ 22.80
Boom Truck (Truck Crane) Operator	\$ 25.00	\$ 5.86	\$ 30.86	Laborers (Helpers & Tenders)	\$ 20.00	\$ 0.89	\$ 20.89
Bulldozer Operator	\$ 24.97	\$ 3.50	\$ 28.47	Loader Operator - Front-End	\$ 20.50	\$ 3.80	\$ 24.30
Carpenter - Rough	\$ 30.76	\$ 19.72	\$ 50.48	Mechanic- Maintenance	\$ 24.00	\$ 3.92	\$ 27.92
Cement Mason/Finisher	\$ 20.50	\$ 1.42	\$ 21.92	Millwright	\$ 25.75	\$ 5.41	\$ 31.16
Communication Equip Installer	\$ 22.00	\$ 0.00	\$ 22.00	Painter	\$ 19.50	\$ 0.00	\$ 19.50
Crane Operator =>15 Tons)	\$ 29.00	\$ 6.68	\$ 35.68	Paver Operator	\$ 30.00	\$ 5.21	\$ 35.21
Crusher Plant Operator	\$ 20.00	\$ 2.39	\$ 22.39	Pipelayer	\$ 23.90	\$ 3.50	\$ 27.40
Electrician - Licensed	\$ 28.00	\$ 5.90	\$ 33.90	Reclaimer Operator	\$ 26.83	\$ 13.25	\$ 40.08
Electrician Helper/Cable Puller	\$ 18.50	\$ 2.39	\$ 20.89	Roller Operator - Earth	\$ 19.83	\$ 0.00	\$ 19.83
Excavator Operator	\$ 24.20	\$ 4.00	\$ 28.20	Roller Operator - Pavement	\$ 23.06	\$ 4.59	\$ 27.65
Fence Setter	\$ 19.00	\$ 2.00	\$ 21.00	Screed/Wheelman	\$ 24.86	\$ 4.18	\$ 29.04
Flagger	\$ 15.50	\$ 0.00	\$ 15.50	Stone Mason	\$ 25.00	\$ 1.88	\$ 26.88
Grader/Scraper Operator	\$ 27.89	\$ 8.90	\$ 36.79	Truck Driver - Heavy	\$ 19.00	\$ 2.03	\$ 21.03
Highway Worker/Guardrail Installer	\$ 24.87	\$ 1.36	\$ 26.23	Truck Driver - Light	\$ 24.15	\$ 0.38	\$ 24.53
Hot Top Plant Operator	\$ 23.91	\$ 13.25	\$ 37.16	Truck Driver - Medium	\$ 21.00	\$ 1.64	\$ 22.64
Industrial Truck (Forklift) Operator	\$ 26.83	\$ 1.48	\$ 28.31	Truck Driver - Tractor Trailer	\$ 20.00	\$ 0.72	\$ 20.72

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

Scatt R. Cotner Attest:

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

Expiration Date: 12-31-2021 Revised 2-25-2021

SPECIAL PROVISIONS <u>SECTION 202</u> REMOVING STRUCTURES AND OBSTRUCTIONS (Removing Pavement Surface)

The November 2014 Revision of the Standard Specifications, Section <u>202-Removing</u> <u>Structures and Obstructions</u>, subsection <u>202.061-Removing</u> Pavement <u>Surface</u>, has been removed and replaced in it's entirety by the following:

<u>202.61</u> <u>Removing Pavement Surface</u> The equipment for removing the bituminous surface shall be a power operated milling machine or grinder capable of removing bituminous concrete pavement to the required depth, transverse cross slope, and profile grade by the use of an automated grade and slope control system. The controls shall automatically increase or decrease the pavement removal depth as required, and readily maintain desired cross slope, to compensate for surface irregularities in the existing pavement course. The equipment shall be capable of accurately establishing profile grades by referencing from a fixed reference such as a grade wire, or from the existing pavement surface using a 30 foot minimum contact ski (floating beam), or 24 foot non-contact grade control beam.

The Contractor shall locate and remove all objects in the pavement through the work area that would be detrimental to the planing or grinding machine. Any structures or obstructions left within the travel lane or shoulders shall have tapers installed according to Standard Detail 202(01). The finished milled surface will be inspected before being accepted, and any deviations in the profile exceeding 1/2 inch under a 16 foot string line or straightedge placed parallel to the centerline will be corrected. Any deviations in the cross-slope that exceed 3/8 inch under a 10 foot string line or straightedge placed transversely to centerline will be corrected. All corrections will be made with approved methods and materials. Any areas that require corrective measures will be subject to the same acceptance tolerances. Excess material that becomes bonded to the milled surface will be removed to the Resident's satisfaction before the area is accepted.

On highways or expressways with directional traffic, the Contractor will be required to remove the pavement surface on the adjacent sections of travel lane and designated portions of adjacent shoulder before the end of the following calendar day unless the centerline edge is tapered to a 12:1. Failure to remove the centerline vertical edge by milling, using the approved taper, or matching the adjacent course the following day will constitute a traffic control violation unless an excusable delay is granted by the Department. The Contractor will be required to remove the specified pavement course over the full width of the mainline traveled ways prior to opening the sections to weekend or holiday traffic.

On roadways with two-way traffic, the Contractor will be required to remove the specified pavement course over the full width of the mainline traveled ways prior to opening the sections to weekend or holidaytraffic.

During any period that a centerline vertical or tapered edge exists, the Contractor will be responsible for installing additional warning signage that clearly defines the centerline vertical or tapered edge and elevation differential hazard, as well as additional centerline delineation such as double RPM application, or temporary painted line. The Traffic Control Plan shall include the additional requirements. All signs and traffic control devices will conform to Section 719.01, and Section 652, and will be installed prior to the work, at a maximum spacing of 0.50 mile for the entire length of the effected roadway section. All additional signing, labor, traffic control devices, or incidentals will not be paid for directly, but will be considered incidental to the appropriate 652 bid items.

When pavement milling operations leave a 2 inch or less exposed vertical face at the edge of the traveled way, RPMs shall be placed on the remaining pavement surface along the vertical edge at 200 foot intervals. Uneven pavement signs shall be placed at a maximum spacing of ½ mile when pavement milling operations leave an exposed vertical face at the edge of travelway.

When pavement milling operations on directional or bi-directional traffic roadways leave an exposed vertical face greater than 2 inches at the edge of the traveled way the edge shall be either;

1. Be tapered to a zero edge by means of milling a 12:1 transition from the edge of traveled way onto the shoulder before opening the lane to traffic. Tapers shall be removed to form a vertical edge prior to the placement of the new pavement course. No additional payment will be made for tapers, or taper removal.

2. Have an additional 2 feet of pavement shall be removed from the shoulder to eliminate the vertical edge at the edge of travelway before opening the lane to traffic. Payment will be made under the pavement removalitem.

3. A pavement layer will be placed to reduce the vertical edge to 2 inch or less before opening the lane to traffic.

As a minimum, the use of temporary painted line, or RPMs placed along the edge of traveled way at 200 foot intervals is required. When pavement milling is extended into the shoulder (including milled tapers), appropriate channelization devices shall be placed 2 feet outside the edge of the vertical face at intervals not exceeding 600 feet, and RPMs shall be placed on the remaining pavement surface along the vertical edge at 200 foot intervals. Uneven pavement signs shall be placed at a maximum spacing of ½ mile when any pavement milling operations leaves an exposed uneven pavement surface.

Any areas of concern, such as de-lamination or pot-holing shall be identified on a continuous basis as milling progresses. Proper corrective action will be determined by the Contracting Officer Representative and the Contractor's QC manager. These areas shall be removed or shimmed as required at no additional cost to the government.

MAINE AIR NATIONAL GUARD BANGOR, MAINE

SECTION 011000 SUMMARY OF WORK

MAINE AIR NATIONAL GUARD 101st CIVIL ENGINEER SQUADRON (AMC) 106 ASHLEY STREET, SUITE 486 BANGOR, MAINE 04401-3051

REPAIR PAVEMENTS SOUTH PORTLAND AIR NATIONAL GUARD BGS PROJECT NUMBER: 3249



FOR UNITED STATES PROPERTY AND FISCAL OFFICES MAINE NATIONAL GUARD AUGUSTA, MAINE 04333

PART 1 <u>GENERAL:</u>

- 1.1. LOCATION: Maine Air National Guard (ANG), 50 Western Ave., South Portland, Maine 04106.
- **1.2. CONTRACTING OFFICER / OWNERS REPRESENTATIVES:** The 101st Civil Engineer Squadron provides all technical advice or assistance. The following individuals are the designated owner's representatives for this project: Glen Tompkins and SrA Tyler Field.
- **1.3. PERIOD OF PERFORMANCE:** The Contractor shall be required to complete work under this contract within the contract performance period specified in the contract. Construction workdays shall be 7:00 AM to 3:30 PM Monday through Friday excluding Federal and State Holidays.

1.4. GOVERNMENT FURNISHED MATERIALS: None.

- **1.5. SUBMITTALS:** Provide electronic submittals to the COR for review and approval. For this project, the following submittals shall be required.
 - **1.5.1.** Safety Data Sheets of chemicals (used and installed), and estimated amounts to be used during the course of the project, prior to use of the chemical.
 - **1.5.2.** Project Schedule, with a two week look ahead (updated weekly).
 - **1.5.3.** Mix Design Hot Mix Asphalt 9.5 mm MDOT approved surface mix.
 - **1.5.4.** Pavement layout plan. Identify paving lanes and longitudinal joints.
- **1.6. OPERATIONS SECURITY (OPSEC):** Contractors will not disclose any details of the installation's infrastructure, operations, personnel staffing or specifics of their project on the installation. The Air Force OPSEC Program aims to reduce the vulnerability of Air Force missions to information collection and exploitation by adversarial groups or individuals. Contractors, subcontractors, and their employees can actively participate in OPSEC by refraining from asking questions about or publically repeating knowledge of the following base information or activities: movement and capabilities of forces, personnel and equipment present; operations of the base in general, to include timing or positioning of aircraft; manning or operations of security posts; aircraft or personnel schedule information; and/or personally identifiable information such as rank, names, phone numbers, etc. OPSEC training, consistent with Air Force OPSEC training is desired, it will be provided at no cost to the contractor and will be accomplished within normal project hours. Anticipated duration of training is 30 minutes. The Contracting Officer Representative will coordinate the training.
- **1.7. AT LEVEL 1 TRAINING:** All contractor employees, to include subcontractor employees, requiring access to Government Installations, Facilities and Controlled Access areas may complete AT Level I awareness training within 10 calendar days after contract start date or effective date of incorporation of this requirement into the contract, whichever is applicable. Certificates of completion for each affected contractor employee and subcontractor employee will be maintained by the COR or Antiterrorism Representative. AT level I Awareness Training is available through ADLS by completing the Force Protection CBT.

1.8. ACCESS AND GENERAL PROTECTION/SECURITY POLICY AND PROCEDURES: The contractor shall comply with all applicable installation/facility access and local security policies and procedures, which may be obtained from the Contracting Officer's Representative (COR). The contractor shall also provide all information required for

<u>background checks to meet installation access requirements to be accomplished by the</u> <u>local installation's 101st Security Forces</u>, Director of Emergency Services, or local Security Office. The contractor shall ensure compliance with all personal identity verification requirements as directed by the DoD, HAF and/or local policy. Should the Force Protection Condition (FPCON) change, the Government may require changes in contractor security matters or processes.

1.9. FOR CONTRACTORS THAT DO NOT REQUIRE COMMON ACCESS CARD (CAC), BUT REQUIRE ACCESS TO A DOD FACILITY AND/OR INSTALLATION: Contractor and all associated sub-contractor employees are required to have a Real ID per Maine Real ID Act. Contractor and all associated sub-contractor employees shall comply with adjudication standards and procedures using the National Crime Center Interstate Identification Index (NCIC-III) and Terrorist Screening Database (TSDB) (AFI 31-101 and AFI 10-245), applicable installation, facility, and area commander installation/facility access and local security policies and procedures (provided by government representative), or (at OCONUS locations) in accordance with status of forces agreements and other theater regulations.

PART 2 PRODUCTS:

- **2.1.** Products need to conform to the following:
 - **2.1.1.** All products shall be in accordance with the Buy American Act.
 - 2.1.2. Products are to be installed in accordance with manufacturer's specifications.
 - **2.1.3.** Products shall conform to Maine Dept. of Transportation Specifications and project documents and drawings.

PART 3 EXECUTION:

3.1. BASE BID ITEMS:

- 3.1.1 Shimming and pavement repairs as required for positive drainage.
- 3.1.2 Overlay pavement main access drive (Approx. 1200 SY).
- 3.1.3 Misc. pavement repair areas shown on C-101 and C-102. (Approx 36 SY)
- 3.1.4 Overlay paved sidewalk to flag pole.
- 3.1.5 Remove pavements, re-grading, the area in front of security guard Bldg.
- 3.1.6 Contractor is required to verify all quantities prior to submission of bid.

3.2 ALTERNATE BID ITEM (ABI) # 01:

3.2.1 Mill existing pavements main access drive (Approx. 1200 SY) shown on drawings C-101. Contractor is required to verify all quantities prior to submission of bids.

3.3. SUMMARY OF WORK:

- 3.3.1. All work shall be accomplished in accordance with the supplemental specification Maine Department of Transportation Standard Specification (Nov. 2014 Edition), UFC 3-270-01 O&M Manual: Asphalt and Concrete Pavement Maintenance and Repair, and all contract drawings and specifications.
- **3.3.2.** All operational practices of the Contractor, workmanship, materials, equipment, and articles used in the performance of this contract shall be in accordance with the manufacturer's printed instructions and specifications, industry standards, and standard trade practices.
- **3.3.3.** The work to be completed on this project consists of, but is not limited to, providing all plant, labor, and materials to complete the following major descriptive items (see attached drawings for locations).
- 3.3.4. Mill pavement to a depth of 1.5 inches, or as necessary to attain the desired final grade and positive drainage. (ABI # 01)
 3.3.4.1. All millings/grindings will become the property of the Contractor.
 3.3.4.2. No milling will commence prior to the Contractor having approved mix designs.
- **3.3.5.** Remove and reclaim material to depth required to install new pavement surface courses where specified.
- **3.3.6.** Contractor shall stop the milling at the electronic gate sensor location and commence milling
- on the other side. The new pavements will be overlay in this area.
- **3.3.7.** Upon removal of existing pavement, the Contractor shall shim and repair low areas to ensure positive drainage.
- **3.3.8.** Apply tack coat to all surfaces where pavement is to be placed. Apply along saw-cuts and milled surfaces.
- 3.3.9. Overlay one and a half (1.50) inches of HMA pavement wearing course (MDOT 703.09 9.5 mm, as required to allow for proper placement of new pavement and to attain desired final grade. See attached drawings for detailed locations.
 - **3.3.9.1.** The Contractor shall minimize pavement joints and ensure continuous placements to the best extent practical.
- **3.3.10** The Contractor shall raise or lower all manholes, catch basins, and valves to match grade of new pavement.

3.4. SAFETY:

- **3.4.1.** The Contractor shall coordinate activities throughout the project in such a manner as to allow one lane open for in and outgoing traffic at all times.
- **3.4.2.** The Contractor shall coordinate activities throughout the project in a manner that allows emergency access to all existing roadways at all times without delays to emergency vehicle response time. The Contractor shall provide flaggers and traffic control as necessary.
- **3.4.3.** The Contractor shall submit all SDS of chemicals (used and installed), and estimated amount to be used during the course of the project to the COR for coordination with the base Bioenvironmental and Environmental offices for approval, prior to use of the chemical.

3.5. MISCELLANEOUS:

- **3.5.1.** The Contractor shall execute daily cleanup and disposal of debris, rubbish, and solid wastes generated at the worksite.
- **3.5.2.** The Contractor shall be responsible for providing portable lavatories. Location and staging area shall be coordinated with COR.
- **3.5.3.** Submission of a Bid by a Contractor shall be accepted as prima-facie evidence that they have examined the specifications and drawings and have satisfied themselves as to the nature and location of the site of the proposed work and all other matters which can in any way affect the work or the cost thereof under this Contract. Any failure of the Contractor to acquaint himself with all available information, including a physical survey of the site of the proposed work, will not relieve him from successfully performing all the work required to be done for a complete, finished job.
- **3.5.4.** The above brief outline of principle features of the work in no way limits the responsibility of the Contractor to perform all work and furnish all paint, labor, and materials and equipment required by the Statement of Work, plans, and specifications referred to herein.

SECTION 015000 - TEMPORARY CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract and Statement of Work, apply to this Section.

1.2 SUMMARY

- A. Section includes requirements for support facilities, and security and protection facilities.
- B. Related Requirements:
 - 1. Section 31100 "Site Clearing" for temporary erosion and sedimentation control measures.
 - 2. Statement of Work and Contract for work restrictions and limitations on utility interruptions.

1.3 ACTION SUBMITTALS

- A. Submittals shall comply with the requirements of the Construction Contract Clauses, Statement of Work and the individual sections specifying the work.
- B. Traffic Control Plan
- C. Erosion and Sediment Control Plan, to include DEP required certification.

PART 3 - EXECUTION

3.1 SUPPORT FACILITIES INSTALLATION

- A. Traffic Controls: Comply with requirements of authorities having jurisdiction.
 - 1. Contractor shall provide an adequate number of safety cones, detour signs, manpower and flaggers for safe traffic control as required. All traffic control devices and setups shall conform to the latest edition of Part VI of the Manual on Uniform Traffic Control Devices (MUTCD).
 - 2. Protect existing site improvements to remain including curbs, pavement, and utilities.
 - 3. Maintain access for fire-fighting equipment and access to fire hydrants.
- B. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
 - 1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent work or temporary facilities.
 - 2. Remove snow and ice as required to minimize accumulations.

TEMPORARY CONTROLS

3.2 SECURITY AND PROTECTION FACILITIES INSTALLATION

- Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
 - 1. Comply with work restrictions specified in Statement of Work and Contract.
- B. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to undisturbed areas and to adjacent properties and walkways, comply with environmental regulations.
 - 1. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross tree- or plant- protection zones.
 - 2. Inspect, repair, and maintain erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
 - 3. Clean, repair, and restore adjoining properties and roads affected by erosion and sedimentation from Project site during the course of Project.
 - 4. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.
- C. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater fromheavy rains.
- D. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- E. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction.

END OF SECTION

SECTION 312000 - EARTH MOVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the Statement of Work, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Preparing subgrades for sidewalks, pavements, lawns and grasses.
 - 2. Sub-base and base courses.
 - 3. Crushed stone.
 - 4. Geotextile fabrics for sub-drainage.
 - 5. Warning and identification tape.
- B. Related Sections:
 - 1. Section 015000 "Temporary Controls" for temporary controls and support facilities.
 - 2. Section 311000 "Site Clearing" for temporary erosion and sedimentation control measures, site clearing, grubbing, stripping and stockpiling existing topsoil, and removal of above- and below-grade improvements and utilities.
 - 3. Section 329200 "Turf and Grasses" for finish grading in turf and grass areas, including preparing and placing topsoil.

1.3 DEFINITIONS

- A. Backfill: Soil material used to fill an excavation.
- B. Base Course: Aggregate layer placed between the sub-base course and finish surface materials.
- C. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.
- D. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of porewater.
- E. Drainage Fill: Material placed around subsurface drainage piping to promote drainage of groundwater.
- F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.
 - 1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Contracting Officer. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the work.

- 2. Bulk Excavation: Excavation more than 10 feet in width and more than 30 feet in length.
- 3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Contracting Officer. Unauthorized excavation, as well as remedial work directed by Contracting Officer, shall be without additional compensation.
- G. Fill: Soil materials used to raise existing grades.
- H. Rock: Rock material in beds, ledges, unstratified masses, conglomerate deposits, and boulders of rock material 2 cu. yd. or more in volume that exceed a standard penetration resistance of 100 blows/2 inches when tested by an independent geotechnical testing agency, according to ASTM D 1586.
- I. Sub-base Course: Course placed between the subgrade and aggregate base course, or course placed between the subgrade and a cement concrete slab or pad.
- J. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below sub-base, drainage fill, or topsoil materials.
- K. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

1.4 ACTION SUBMITTALS

- A. Submittals shall comply with the requirements of the Construction Contract Clauses, Statement of Work and the individual sections specifying the work.
- B. Product Data: For the following:
 - 1. Warning tape.
 - 2. Geotextile.
- C. Material Test Reports: For each on-site and borrow soil material proposed for fill, backfill, and aggregate courses as follows:
 - 1. Classification according to ASTM D 2487 for each on-site and borrow soil material proposed for satisfactory soil.
 - 2. Laboratory gradation analysis in accordance with ASTM C 117 and C 136 for each material proposed for aggregate and stone.
 - 3. Laboratory compaction curve according to ASTM D 1557 for each on-site or borrow material proposed for soil, aggregate and stone.

1.5 QUALITY ASSURANCE

- Geotechnical Testing Agency Qualifications: Qualified according to ASTM E 329 and ASTM D 3740 for testing indicated.
- B. Pre-excavation Conference: Conduct conference at Project site.
- 1.6 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks and other adjacent occupied or used facilities during earth moving operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Government and authorities having jurisdiction.
 - 2. Provide alternative routes around closed or obstructed traffic ways if required by Government or authorities having jurisdiction.
- B. Utility Locator Service: Contact 101st Civil Engineer Squadron at 404-7307 and obtain utility clearance prior to commencing excavation operations on the site. Also contact "DIGSAFE" at 1-888-344-7233 and obtain a DIGSAFE permit prior to commencing excavation operations on the site.
- C. Do not commence earth moving operations until temporary erosion- and sedimentation-control measures are in place.
- D. The following practices are prohibited within protection zones:
 - 1. Storage of construction materials, debris, or excavated material.
 - 2. Parking vehicles or equipment.
 - 3. Excavation or other digging unless otherwise indicated.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Base Material: Aggregate for base shall conform to the Maine Department of Transportation Standard Specifications, Highways and Bridges, (MDOT), Subsection 703.06, Type A.
- C. Satisfactory Soils: ASTM D 2487 Soil Classification Groups GW, GP, GM, GC, SW, SP, SM, and SC or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- D. Unsatisfactory Soils: Soil Classification Groups CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487, or a combination of these groups.
 - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- E. Sub-base Material: Aggregate for sub-base shall conform to the MDOT, Subsection 703.06, Type D. Aggregate for sub-base shall not contain particles of rock which will not pass the 4 inch square mesh sieve.
- F. Structural Fill: Aggregate for structural fill shall be sand or gravel of hard durable particles, free from vegetable matter, lumps or balls of clay and other deleterious substances and shall conform to the following gradation:

Screen or Sieve Size	Percent Passing
4 inches	100
3 inches	90-100
1/4 inch	25-90
No. 40	0-30
No. 200	0-5

- 1. Maximum particle size shall be limited to 3 inches within three feet of foundation walls, footings and floor slabs, or if compacted by hand-guided equipment.
- G. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2321, Class IB or II, except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
- J. Drainage Fill and Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel, free of organic matter, soft disintegrated pieces and other deleterious substances, and conforming to the following gradation (ASTM D 448, Size Number 57):

Screen or Sieve Size	Percent Passing
1-1/2 inch	100
1 inch	95-100
1/2 inch	25-60
No. 4	0-10
No. 8	0-5

K. Crushed Stone: Shall be rock of uniform quality and shall consist of angular fragments of quarried rock, free from soft disintegrated pieces or other objectionable matter conforming to the following gradation (ASTM D 448. Size Number5):

Sieve Size	Percent Finer by Weight
1-1/2 inch	100
1 inch	90-100
3/4 inch	20-55
1/2 inch	0-10
3/8 inch	0-5

2.2 GEOTEXTILES

- A. Geotextile: Nonwoven needle-punched geotextile, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:
 - 1. Survivability: Class 2; AASHTO M 288.
 - 2. Grab Tensile Strength: 120 lbf; ASTM D 4632.
 - 3. Grab Elongation: 50%; ASTM D 4632.
 - 4. Tear Strength: 50 lbf; ASTM D4533.
 - 5. Puncture Strength: 70 lbf; ASTM D 4833.
 - 6. Apparent Opening Size: No. 70 sieve, maximum; ASTM D 4751.
 - 7. Permeability: 0.2 centimeters per second, minimum; ASTM D 4491.

MAINE AIR NATIONAL GUARD BANGOR, MAINE

8. UV Stability: 70 percent after 500 hours' exposure; ASTM D4355.

2.3 ACCESSORIES

- A. Detectable Warning Tape: Acid- and alkali-resistant polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep; colored as follows:
 - 1. Red: Electric.
 - 2. Orange: Telephone or other communications.
 - 3. Blue: Water systems.
 - 4. Green: Sewer systems.
 - 5. Yellow: Natural gas.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, surfaces, vegetation, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
- B. Preparation of subgrade for earthwork operations including removal of vegetation, topsoil, debris, obstructions, and deleterious materials from ground surface is specified in Section 311000 "Site Clearing."
- C. Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
- D. Protect subgrades and soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 DEWATERING

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
 - 2. Install a dewatering system to keep subgrades dry and convey ground water away from excavations. Maintain until dewatering is no longer required.

3.3 EXPLOSIVES

A. Explosives: Do not useexplosives.

EARTH MOVING

MAINE AIR NATIONAL GUARD BANGOR, MAINE

3.4 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.
 - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

3.5 EXCAVATION FOR WALKS AND PAVEMENTS

A. Excavate under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.6 SUBGRADE INSPECTION

- A. Notify Contracting Officer when excavations have reached required subgrade.
- B. If Contracting Officer determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or structural fill material as directed.
- C. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
- D. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Contracting Officer, without additional compensation.

3.7 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of trees.

3.8 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:
 - 1. Construction below finish grade including, where applicable, sub-drainage and dampproofing.
 - 2. Surveying locations of underground utilities for Record Documents.
 - 3. Removing trash and debris.
 - 4. Installing indicated structural elements.
- B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.9 FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:
 - 1. Under grass and planted areas, use satisfactory soil material.
 - 2. Under walks and pavements, use satisfactory soil material.
- C. Place soil fills on subgrades free of mud, frost, snow, or ice.

3.10 SOIL MOISTURECONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
 - 1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
 - 2. Remove and replace, or scarify and air dry, otherwise suitable soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.11 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D1557:
 - 1. Under pavements, compact each layer of backfill or fill material at 95 percent.
 - 2. Under walks, compact each layer of backfill or fill material at 95 percent.
 - 3. Under turf or unpaved areas, compact each layer of backfill or fill material at 85 percent.

3.12 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - 1. Provide a smooth transition between adjacent existing grades and new grades.
 - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Grading: Slope grades to direct water away from structures and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
 - 1. Lawn or Unpaved Areas: Plus or minus 1 inch.
 - 2. Pavement Areas: Plus or minus 1/2 inch.

EARTH MOVING

MAINE AIR NATIONAL GUARD BANGOR, MAINE

3.13 SUBBASE AND BASE COURSES

- A. Install sub-base and base course in accordance with the construction requirements of MDOT Section 304, except as modified herein.
- B. On prepared subgrade, place sub-base and base course as follows:
 - 1. Place sub-base and base course on a compacted subgrades free of mud, frost, snow, or ice.
 - 2. Shape sub-base and base to required crown elevations and cross-slope grades.
 - 3. Place sub-base and base course 6 inches or less in compacted thickness in a single layer.
 - 4. Place sub-base and base course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
 - 5. Compact sub-base and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.

3.14 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified independent geotechnical engineering testing agency to perform field quality-control testing.
- B. Allow testing agency to inspect and test subgrades and each fill and backfill layer. Proceed with subsequent earthwork only after test results for previously completed work comply with requirements.
- C. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2922, and ASTM D 2937, as applicable. Tests will be performed at the following locations and frequencies:
 - 1. Paved Areas: At subgrade and at each compacted layer, at least one test for every 2000 sq. ft. or less of paved area building slab, but in no case fewer than three tests.
- D. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil to depth required; re-compact and retest until specified compaction is obtained.

3.15 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 - 1. Scarify or remove and replace soil material to depth as directed by Contracting Officer; reshape and re-compact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.16 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Government's property.

END OF SECTION

SECTION 321216 - ASPHALT PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the Statement of Work, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Hot-mix asphalt patching.
 - 2. Hot-mix asphalt paving.
 - 3. Curbs.
 - 4. Pavement marking paint.
 - 5. Traffic signs.
- B. Related Requirements:
 - 1. Section 312000 "Earth Moving" for subgrade preparation, fill material, and aggregate sub-base and base courses.

1.3 ACTION SUBMITTALS

- A. Submittals shall comply with the requirements of the Construction Contract Clauses, Statement of Work and the individual sections specifying the work.
- B. Pavement Plan: Identifying the sequence of paving, joint layout (including placement of longitudinal joints), project lots or sub lots.
- C. Traffic Control Plan.
- D. MDOT approved Mix Design.

MAINE AIR NATIONAL GUARD BANGOR, MAINE

1.4 INFORMATIONAL SUBMITTALS

- A. Submittals shall comply with the requirements of the Construction Contract Clauses, Statement of Work and the individual sections specifying the work.
- B. Quality Control Plan according to MDOT Standard Specification Section 106 and Section 401, method C.
- C. Qualification Data: For manufacturer.
- D. Material Test Reports: For each paving material, by a qualified testing agency.
- E. Field quality-control reports.
- F. Make and model of nuclear density tester and required permitting (if used during project).

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A paving-mix manufacturer registered with and approved by the Maine DOT.
- B. Testing Agency Qualifications: Qualified according to ASTM D 3666 for testing indicated.
- C. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of the State of Maine Department of Transportation Standard Specifications, latest edition, for asphalt paving work and related activities.
 - 1. Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

1.6 FIELD CONDITIONS

A. Environmental Limitations: Do not place asphalt materials after sunset or before sunrise unless coordinated by COR. Do not apply asphalt materials if subgrade is wet or excessively damp, if raining, rain is imminent or is expected before time required for adequate cure, or if the following conditions are not met:

PART 2 - PRODUCTS

2.1 AGGREGATES

A. Comply with MDOT, Paragraph 703.07, for 0.3 to 3 million 18 kip ESALs.

2.2 ASPHALT MATERIALS

A. Comply with MDOT, Paragraph 702.01, performance graded asphalt binder (PGAB), PG 64-28.

2.3 AUXILIARY MATERIALS

- A. Recycled Materials for Hot-Mix Asphalt Mixes: Reclaimed asphalt pavement; reclaimed, unbound-aggregate base material; and recycled tires or asphalt shingles from sources and gradations that have performed satisfactorily in previous installations, equal to performance of required hot-mix asphalt paving produced from all new materials.
- B. Sand: ASTM D 1073 or AASHTO M 29, Grade No. 2 or No. 3.
- C. Pavement-Marking Paint: Latex, waterborne emulsion, lead and chromate free, ready mixed, complying with FS TT-P-1952, Type II, with drying time of less than 45 minutes.
 - 1. Color: Match existing, unless specified otherwise.

2.4 MIXES

- A. Recycled Content of Hot-Mix Asphalt: Reclaimed asphalt pavement content (RAP) in the mix design is not a requirement for this project. If used not less than 15 percent reclaimed asphalt pavement (RAP) or more than 25 percent by weight in accordance with MDOT Standard Specifications, Section401.02.
- B. Hot-Mix Asphalt: Dense-graded, hot-laid, hot-mix asphalt plant mixes approved by Maine DOT and complying with the following requirements:
 - 1. Provide mixes with a history of satisfactory performance in geographical area where Project is located.
 - 2. Per project design.

2.5 BITUMINOUS TACK COAT

A. Type: RS-1 or RS-1H in accordance with MDOT Standard Specification, Section 409.

2.6 CURBS

A. Vertical Granite Curbs: Provide in conformance with MODT Standard Specifications, Section 712.04. All curbs with a radius of between 60 and 125 feet shall be constructed of straight sections of a minimum 4 to 6 foot length.

2.7 TRAFFIC SIGNS

A. Provide in conformance with MDOT Standard Specification, Section 645 and Manual on Uniform Traffic Control Devices (MUTCD), latest edition.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that subgrade is dry and in suitable condition to begin paving, notify KO and COR if they are not.
- B. Proof-roll subgrade below pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
 - 1. Completely proof-roll subgrade in one direction. Limit vehicle speed to 3 mph.
 - 2. Proof roll with a loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons.
 - 3. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Contracting Officer, and replace with compacted backfill or fill as directed.
- C. Proceed with paving only after unsatisfactory conditions have been corrected.
- D. Provide a vacuum truck to thoroughly sweep and clean all milled or paved areas daily to prevent foreign objects, debris or pavement milling from getting tracked onto the airfield.

3.2 REPAIRS AND PATCHING

- A. Asphalt Pavement: Saw cut perimeter of patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 12 inches into perimeter of adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Re-compact existing unbound-aggregate base course to form new subgrade.
- B. Tack Coat: Before placing patch material, apply tack coat uniformly to vertical asphalt surfaces abutting the patch. Apply at a rate of 0.05 to 0.15 gal./sq. yd..
 - 1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
 - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.
- C. Placing Patch Material: Fill excavated pavement areas with hot-mix asphalt base mix for full thickness of patch and, while still hot, compact flush with adjacent surface.
- D. Placing Patch Material: Partially fill excavated pavements with hot-mix asphalt base mix and, while still hot, compact. Cover asphalt base course with compacted, hot-mix surface layer finished flush with adjacent surfaces.

3.3 SURFACE PREPARATION

A. General: Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.

3.4 TACK COAT

- A. All surfaces require uniform application, prior to placing any new pavement, at a rate of:
 - 1. 0.03 gal/sq. yd. on existing pavement
 - 2. 0.05 gal/sq. yd. on milled pavement
 - 3. Fog coat between shim and base course
- B. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
- C. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

3.5 PLACING HOT-MIX ASPHALT

- A. Place asphalt mix by hand in areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.
 - 1. After first strip has been placed and rolled, place succeeding strips and extend rolling to overlap previous strips. Overlap mix placement about 1 to 1-1/2 inches from strip to strip to ensure proper compaction of mix along longitudinal joints.
- B. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

3.6 JOINTS

- A. Clean contact surfaces and apply tack coat to joints.
- B. Offset longitudinal joints, in successive courses, a minimum of 6 inches.
- C. Offset transverse joints, in successive courses, a minimum of 24 inches.
- D. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method according to AI MS-22, for both "Ending a Lane" and "Resumption of Paving Operations."
- E. Compact joints as soon as hot-mix asphalt will bear roller weight without excessive displacement.
- F. Compact asphalt at joints to a density within 2 percent of specified course density.
- G. Limit joints to the greatest extent practical.

3.7 EXISTING CONDITIONS

- A. Where new pavement matches to old, insure proper binding of the two materials. Utilize tack coat as required. Both existing and new surfaces shall meet in a smooth continuous plane free from variations in height or smoothness. Clean all areas to meet thoroughly prior to installation.
- B. If existing pavement edge gets undermined, damaged, or cracked, re-cut straight line on that side of the excavation to maintain a uniform edge on the repairs.
- C. Contractor shall inspect, loosen, lower, repair and reset existing manholes, catch basins and water valves to match final grade of surrounding pavement. Notify COR if there is a manhole found to be damaged or requiring repair work to the grade ring, frame or cover.

3.8 COMPACTION

- A. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.
- B. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
- A. Protection: After final rolling, do not permit vehicular traffic on pavement until it has hardened and cooled to at least 120 degrees. Measure surface temperature with approved surface thermometers or other satisfactory methods.
- B. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

3.2 PAVEMENT MARKING

- A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Contracting Officer.
- B. Allow paving to age for a period of time recommended by the pavement marking paint manufacturer before starting pavement marking. Install temporary centerline reflective markers until painting is completed.
- C. Sweep and clean surface to eliminate loose material and dust.
- D. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thicknessof 15-mils.

3.3 CURB INSTALLATION

A. Install according to MDOT Standard Specifications, Section 609.

3.4 SIGN INSTALLATION

A. Install according to MDOT Standard Specifications, Section 645.

3.5 INSTALLATION TOLERANCES

- A. Pavement Thickness: Compact each course to produce the thickness indicated within the following tolerances:
 - 1. Binder Course: Plus or minus 1/4 inch.
 - 2. Wearing Course: Plus 1/4 inch, no minus.
- B. Pavement Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot straightedge applied transversely or longitudinally to paved areas:
 - 1. Binder Course: 1/4 inch.
 - 2. Wearing Course: 1/8 inch.
 - 3. Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template is 1/4 inch.

3.6 FIELD QUALITY CONTROL

- A. Testing Agency: Engage an independent qualified testing agency to perform tests and inspections.
 - 1. Agency shall be on site during all paving operations recording, at a minimum: truck ID number, time, weather, mix type, lift thickness, equipment used, number of roller passes and temperature of pavement during placement.
 - 2. Log shall be signed by agency and provided to COR at the end of every work day.
- B. Thickness: Determine in-place compacted thickness of hot-mix asphalt courses according to ASTM D 3549.
- C. Surface Smoothness: Test finished surface of each hot-mix asphalt course for compliance with smoothness tolerances.
- D. Surface Tolerance: Checked according to Maine DOT Standard Specifications, sections 401.101. Upon request the Contractor shall supply a ten foot straightedge to verify surface tolerances. All pavement shall be install to allow for positive drainage.
- E. In-Place Density: (NOT IN CONTRACT) Testing agency will take samples of uncompacted paving mixtures and compacted pavement according to ASTM D 979 or AASHTO T 168.
 - 1. Reference maximum theoretical density will be determined by averaging results from four samples of hot-mix asphalt-paving mixture delivered daily to site, prepared according to ASTM D 2041, and compacted according to job-mix specifications.
 - 2. Determine in-place density of compacted pavement by testing core samples according to ASTM D 1188 or ASTM D 2726.
 - a. Take one core sample for every 2500 sq. yd. or less of installed pavement, take no fewer than three cores perday.
 - b. Field density of in-place compacted pavement may also be determined by nuclear method according to ASTM D 2950 and correlated with ASTM D 1188 or ASTM D 2726.
- F. Replace and compact hot-mix asphalt where core tests were taken.
- G. COR shall review all compactions tests prior to the next lift installation or progression of work.
- H. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.
- 3.1 DISPOSAL OF SURPLUS AND WASTE MATERIALS
 - A. Disposal: Remove surplus and waste material, including trash, and debris, and legally dispose of it off Government's property.

END OF SECTION