Updated 12/01/08

FEDERAL PROJECT

Effective December 1, 2008
Supersedes November 4, 2008

BIDDING INSTRUCTIONS

FOR ALL PROJECTS:

1. Use pen and ink to complete all paper Bids.
2. As a minimum, the following must be received prior to the time of Bid opening:

For a Paper Bid:

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

For an Electronic Bid:

a) a completed Bid using Expedite® software and submitted via the Bid Express™ webbased service, b) a Bid Guaranty (as described below) or a faxed copy of a Bid Bond (with original to be delivered within 72 hours), and c) any other certifications or Bid requirements listed in the Bid Documents as due by Bid opening.

3. Include prices for all required items in the Schedule of Items. ("Zero is not considered a Bid price.")
4. Include a Bid Guaranty. Acceptable forms are:
   a) a properly completed and signed Bid Bond on the Department's prescribed form (or on a form that does not contain any significant variations from the Department's form as determined by the Department) for 5% of the Bid Amount or
   b) an Official Bank Check, Cashier's Check, Certified Check, U.S. Postal Money Order or Negotiable Certificate of Deposit in the amount stated in the Notice to Contractors.
5. If a paper Bid is to be sent, Federal Express overnight delivery is suggested as the package is delivered directly to the DOT Headquarters Building located at 16 Child Street in Augusta.
6. Other means, such as U.S. Postal Service's Express Mail has proven not to be reliable.

IN ADDITION, FOR FEDERAL AID PROJECTS:

7. Complete the DBE Proposed Utilization form in the proper amounts, and submit with your bid on bid opening day. If you are submitting your bid electronically, you must FAX your DBE Utilization Form to (207) 624-3431.

If you need further information regarding Bid preparation, call the DOT Contracts Section at (207) 624-3410.

For complete bidding requirements, refer to Section 102 of the Maine Department of Transportation, Standard Specifications, Revision of December 2002.

January 30, 2004
Supercedes February 11, 2003

NOTICE

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

Prospective bidders, subcontractors or suppliers who wish to download a copy of the bid package and receive a courtesy notification of project specific bid amendments, must provide an email address to Diane Barnes or David Venner at the MDOT Contracts mailbox at: MDOT.contracts@maine.gov. Each bid package will require a separate request.

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

The downloading of bid packages from the MDOT website is not the same as providing an electronic bid to the Department. Electronic bids must be submitted via http://www.BIDX.com. For information on electronic bidding contact Larry Childs at Larry.Childs@maine.gov.

NOTICE

For security and other reasons, all Bid Packages which are mailed, shall be provided in double (one envelope inside the other) envelopes. The *Inner Envelope* shall have the following information provided on it:

Bid Enclosed - Do Not Open
PIN:
Town:
Date of Bid Opening:
Name of Contractor with mailing address and telephone number:

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

Double Envelope: Bid Enclosed
PIN:
Town:
Date of Bid Opening:
Name of Contractor:
This should not be much of a change for those of you who use Federal Express or similar services.

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

Bid Enclosed: Do Not Open
PIN:
Town:
Name of Contractor:

STATE OF MAINE DEPARTMENT OF TRANSPORTATION

Bid Guaranty-Bid Bond Form

KNOW ALL MEN BY THESE PRESENTS THAT_____

_____, of the City/Town of _____and State of_____

as Principal, and _____as Surety, a

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

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

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

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

The condition of this obligation is that the Principal has submitted to the Maine Department of Transportation, hereafter Department, a certain bid, attached hereto and incorporated as a part herein, to enter into a written contract for the construction of _____

_____

_____and if the Department shall accept said bid and the Principal shall execute and deliver a contract in the form attached hereto (properly completed in accordance with said bid) and shall furnish bonds for this faithful performance of said contract, and for the payment of all persons performing labor or furnishing material in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be null and void; otherwise it shall remain in full force, and effect.

Signed and sealed this_____day of _____20_____

WITNESS:

_____

_____

_____

WITNESS

_____

_____

_____

PRINCIPAL:

By_____

By:_____

By:_____

SURETY:

By_____

By:_____

Name of Local Agency: _____

NOTICE

Bidders:

Please use the attached “Request for Information” form when faxing questions and comments concerning specific Contracts that have been Advertised for Bid. Include additional numbered pages as required. Questions are to be faxed to the number listed in the Notice to Contractors. This is the only allowable mechanism for answering Project specific questions. Maine DOT will not be bound to any answers to Project specific questions received during the Bidding phase through other processes.

State of Maine
Department of Transportation

REQUEST FOR INFORMATION

Date _____ Time _____

Information Requested: **PIN: _____** **Town(s): _____**

_____

_____

_____

_____

_____

_____

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_____

_____

_____

_____

Request by: _____ **Phone: (_____)_____**
Bid Date: _____ **Fax: (_____)_____**

Complete top portion of form and transmit to the number listed in the Notice to Contractors

RFI No: _____ **RFI received: _____**

Response:_____

_____

_____

_____

_____

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_____

_____

_____

Response By:_____ Date: _____

NOTICE

Disadvantaged Business Enterprise Proposed Utilization

The Apparent Low Bidder must submit the Disadvantaged Business Enterprise Proposed Utilization form with their bid.

The Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form contains additional information that is required by USDOT.

The Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan form must be used.

A copy of the new Contractor's Disadvantaged Business Enterprise Proposed Utilization Plan and instructions for completing it are attached.

Note: Questions about DBE firms, or to obtain a printed copy of the DBE Directory, contact The Office of Civil Rights at (207) 624-3066.

MDOTs DBE Directory of Certified firms can also be obtained at www.maine.gov/mdot/disadvantaged-business-enterprises/dbe-home.php

INSTRUCTIONS FOR PREPARING THE CONTRACTOR'S DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION PLAN

The Contractor Shall:

1. Submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan with your bid on the Bid day.

2. Extend equal opportunity to MDOT certified DBE firms (as listed in MDOT's DBE Directory of Certified Businesses) in the selection and utilization of Subcontractors and Suppliers.

SPECIFIC INSTRUCTIONS FOR COMPLETING THE FORM:

Insert Contractor name, the name of the person(s) preparing the form, and that person(s) telephone and fax number.

Provide total Bid price, Federal Project Identification Number, and location of the Project work.

In the columns, name each DBE firm to be used, provide the Unit or Item cost of the Work/Product to be provided by the DBE firm, give a brief description of the Work, and the dollar value of the Work.

If no DBE firm is to be utilized, the Contractor must document the reason(s) why no DBE firms are being used. Specific supporting evidence of good faith efforts taken by Contractors to solicit DBE Bidders must be attached. This evidence, as a minimum, includes phone logs, e-mail and/or mail DBE solicitation records, and the documented results of these solicitations.

NOTICE

Maine Department of Transportation
Disadvantaged Business Enterprise Program

Notice is hereby given that in accordance with US DOT regulation 49 CFR Part 26, the Maine Department of Transportation has established a DBE Program for disadvantaged business participation in the federal-aid construction program; MaineDOT contracts covered by the program include consulting, construction, supplies, manufacturing, and service contracts.

For FFY 2009 (October 1, 2008 through September 30, 2009), MaineDOT has established a DBE participation goal of 5.8% to be achieved through race/gender neutral means.

Interested parties may view MaineDOT's DBE goal setting methodology for the next 45 days during normal business hours (8-4, M-F) at the Maine Department of Transportation, Civil Rights Office, 16 State House Station, Augusta ME 04333-0016. Appointments may be scheduled by telephone at (207) 624-3519. The goal setting methodology is also available for viewing on the MaineDOT website: http://www.maine.gov/mdot/disadvantaged-business-enterprises/dbe-home.php.

Public comment will be accepted for 45 days following the last date of publication. The public comment period will be complete on September 26th, 2008. The goal will be submitted for approval to the FHWA on September 1st, 2008. Updated goal will be submitted to FHWA, if necessary, based on public comment.

Comments on the goal will be accepted, in writing, for 45 days from the date of this notice. Written comments should be addressed to Jackie LaPerriere, Maine Department of Transportation, Civil Rights Office, 16 State House Station, Augusta, Maine 04333-0016 or by e-mail at: jackie.laperriere@maine.gov.

Several interested stakeholders will be notified directly by e-mail of the goal publication, including Maine Small Business Administration, Associated General Contractors, and ACEC, and Maine DBEs.

____ **Original Submission** **Page ___ of ___**

____ **Revision # _____**

MaineDOT CONTRACTOR'S DBE/SUBCONTRACTOR PROPOSED UTILIZATION FORM

All Bidders must furnish this form with their bid on Bid Opening day

Contractor:_____ **Telephone:** _____ **Ext.** _____

Contact Person:_____ **Fax:** _____

E-mail: _____

BID PRICE: $_____ **BID DATE:** _____/_____/_____

FEDERAL PROJECT PIN # _____ **PROJECT LOCATION:** _____

TOTAL DBE _____ **% PARTICIPATION FOR THIS SUBMISSION**

WBE•	DBE•	Non DBE	Firm Name	Unit/Item Cost	Unit #	Description of Work & Item Number	Actual $ Value
						Total ›	

Contractors must make a good faith effort to include <u>Certified</u> DBE firms in all aspects of the project. If no DBE firms are to be part of this project, a detailed explanation is required. Attach supporting evidence to the maximum participation of DBEs on this project. This is a requirement. This evidence must include name of firm(s) contacted, date contacted, and outcome of solicitation.

Equal Opportunity Use:

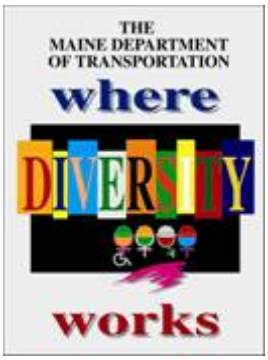
Form received: ___/___/___ Verified by: _____

____ Accepted ____ Rejected _____

cc: ☐ Contracts ☐ Other _____

For a complete list of certified firms and company designation (WBE/DBE) go to http://www.maine.gov/mdot

Rev. 1/08



Maine Department of Transportation
Civil Rights Office

Directory of Certified Disadvantaged Business Enterprises

Listing can be found at:
www.maine.gov/mdot/disadvantaged-business-enterprises/dbe-home.php

For additional information and guidance contact: Civil Rights Office at (207) 624-3066

September 14, 2007

Vendor Registration

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

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
NOTICE TO CONTRACTORS

Sealed bids addressed to the Maine Department of Transportation, 16 State House Station, Augusta, Maine 04333 and endorsed on the wrapper " Bid for **Statewide Geotechnical Drilling**" will be received at the MaineDOT Headquarters on Child Street, Augusta, Maine Reception Desk until 11:00 AM (prevailing time) on **June 17, 2009**, and at that time and place publicly opened and read.

Location: Statewide

Outline of Work: Shall consist of assisting the Departments Central Lab in Bangor to obtain soil samples for individual projects throughout the State of Maine, and other incidental work.

A bidder is required to submit with their bid a completed "Equipment List" form.

A bidder is not required to bid on all regions, but may bid on 1 or more regions. A Bidder is encouraged to bid on all areas due to the variable locations and nature of the work.

List of items provided in this contract Package are estimated quantities only, and provided for determination of low bidder. There shall be no guarantee of a minimum amount of work under this subsequent Task Order Contract. Work will be ordered on an as needed basis. The Department will only pay for actual Items Installed at the cost per unit prices.

For general information regarding Bidding and Contracting procedures, contact Scott Bickford at (207)624-3430. Our webpage at http://www.maine.gov/mdot/contractor-consultant-information/contractor_cons.php contains a copy of the schedule of items, Plan Holders List, written portions of bid amendments (not drawings), and bid results. For Project-specific information fax all questions to the Contracts Section @ (207)624-3431. Questions received after 12:00 noon of **Friday** prior to bid date will not be answered. Bidders shall not contact any other Departmental staff for clarification of Contract provisions, and the Department will not be responsible for any interpretations so obtained. Hearing impaired persons may call the Telecommunication Device for the Deaf at: 888-516-9364.

Bid Documents may be seen at the Maine DOT, in Augusta, Maine, and at the Department of Transportation's Eastern Region 4 Office in Bangor. They may be purchased from the Department between the hours of 8:00 a.m. to 4:30 p.m. by cash, credit card (Visa/Mastercard) or check payable to Treasurer, State of Maine sent to Maine Department of Transportation, Attn.: Mailroom, 16 State House Station, Augusta, Maine 04333-0016. They also may be purchased by telephone at (207)624-3536 between the hours of 8:00 a.m. to 4:30 p.m. Bid Book $10 ($13 by mail), payment in advance, all non-refundable.

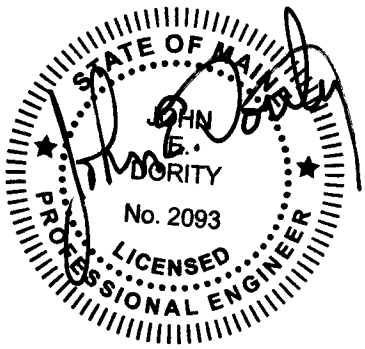
Each bid must be made on the forms provided by the Department.

The contract is subject to all applicable federal laws.

All work shall be governed by "State of Maine, Department of Transportation, Standard Specifications, Revision of December 2002; Price $10, ($13 by mail) and Standard Details, Revision of December 2002, Price $20, ($25 by mail).

The right is hereby reserved by MaineDOT to reject any and all bids.

Augusta, Maine
May 27, 2009



JOHN E. DORITY
CHIEF ENGINEER

NOTICE

All bids for Federal Projects opened after December 1, 2008 **MUST** be accompanied by the DBE Proposed Utilization form. If you are submitting an electronic bid, the DBE Utilization Form may be faxed to 207-624-3431.

SPECIAL PROVISION 102.7.3
ACKNOWLEDGMENT OF BID AMENDMENTS

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

Amendment Number	Date

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

CONTRACTOR

_____ _____
Date Signature of authorized representative

_____
(Name and Title Printed)

Contractor_____ **April 22, 2009**

Region 1

GEOTECHNICAL EXPLORATIONS
SCHEDULE OF ITEMS
2009-2011

Item	Item Number	Approximate Quantities / Units	Price Per Quantity / Unit	Total Price Per Quantity / Unit
Mobilization Land	659.12	10.0 EA.		
Mobilization Water	659.121	2.0 EA.		
Drill Rig for Land	631.40	200.0 HR		
Drill Rig for Water	631.401	100.0 HR.		
Standby Time	631.403	20.0 HR.		
Total Bid				

Region 2

GEOTECHNICAL EXPLORATIONS
SCHEDULE OF ITEMS
2009-2011

Item	Item Number	Approximate Quantities / Units	Price Per Quantity / Unit	Total Price Per Quantity / Unit
Mobilization Land	659.12	10.0 EA.		
Mobilization Water	659.121	2.0 EA.		
Drill Rig for Land	631.40	200.0 HR		
Drill Rig for Water	631.401	100.0 HR.		
Standby Time	631.403	20.0 HR.		
Total Bid				

Contractor_____ **April 22, 2009**

Region 3

GEOTECHNICAL EXPLORATIONS
SCHEDULE OF ITEMS
2009-2011

Item	Item Number	Approximate Quantities / Units	Price Per Quantity / Unit	Total Price Per Quantity / Unit
Mobilization Land	659.12	10.0 EA.		
Mobilization Water	659.121	2.0 EA.		
Drill Rig for Land	631.40	200.0 HR		
Drill Rig for Water	631.401	100.0 HR.		
Standby Time	631.403	20.0 HR.		
Total Bid				

Region 4

GEOTECHNICAL EXPLORATIONS
SCHEDULE OF ITEMS
2009-2011

Item	Item Number	Approximate Quantities / Units	Price Per Quantity / Unit	Total Price Per Quantity / Unit
Mobilization Land	659.12	10.0 EA.		
Mobilization Water	659.121	2.0 EA.		
Drill Rig for Land	631.40	100.0 HR		
Drill Rig for Water	631.401	50.0 HR.		
Standby Time	631.403	20.0 HR.		
Total Bid				

Contractor_____ **April 22, 2009**

Region 5

GEOTECHNICAL EXPLORATIONS
SCHEDULE OF ITEMS
2009-2011

Item	Item Number	Approximate Quantities / Units	Price Per Quantity / Unit	Total Price Per Quantity / Unit
Mobilization Land	659.12	10.0 EA.		
Mobilization Water	659.121	2.0 EA.		
Drill Rig for Land	631.40	100.0 HR		
Drill Rig for Water	631.401	50.0 HR.		
Standby Time	631.403	20.0 HR.		
Total Bid				

Contractor _____

Equipment List

	Drill Rig 1	Drill Rig 2	Drill Rig 3	Drill Rig 4
Rig Type/Model				
Hammer Type	□ Automatic □ Rope & Cathead □ Hydraulic	□ Automatic □ Rope & Cathead □ Hydraulic	□ Automatic □ Rope & Cathead □ Hydraulic	□ Automatic □ Rope & Cathead □ Hydraulic
Hammer Model				
Date of Hammer Calibration *(Automatic and hydraulic winch)*				
Hammer Efficiency Factor				
Other				

Contract Number _____

CONTRACT AGREEMENT, OFFER & AWARD

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

_____

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

_____

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

A. The Work.

The Contractor agrees to complete all Work ordered as specified or indicated in the Contract and Task Order Assignments including Extra Work in conformity with the Contract, for Geotechnical Explorations (Drilling) Projects throughout the State of Maine. The Work includes all drilling, seeding, mulch, planting, construction, and maintenance during construction, warranty as provided in the Contract, and other incidental work.

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

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same. Work will be ordered by a written "Task Order" from the Department. Task Orders will include the quantities of items, location of work, maximum dollar amount, and the time schedule required to complete the work.

B. Time.

The Contractor agrees to complete all ordered Work within the timeframe outlined in the Task Order Assignments This Contract shall be for a two year period from **August 1, 2009 to July 31, 2011**. Warranty work shall be covered under the establishment period as outlined in the Standard Specifications. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of

Maine Department of Transportation Standard Specifications, Revision of December 2002.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the low bidder only. However, unit prices will be used for assigning work under this contract.

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

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

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.

2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.

3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined specifications of work, the Plans, Standard Specifications Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and contained herein for construction of: Various Geotechnical Explorations (Drilling) services throughout the State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items", for each individual Region.

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

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: To begin and complete the Work on the date specified in the contract Administrator's "Task Order Assignment" and complete the Work within the time limits given in the Special Provisions of this Contract.

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

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

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

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

CONTRACTOR

Date	(Signature of Legally Authorized Representative of the Contractor)
Witness	(Name and Title Printed)

G. Award.

Your offer is hereby accepted for (see checked boxes) at the cost per unit prices as outlined in the corresponding "Schedule of Items".

Region 1 ❑

Region 2 ❑

Region 3 ❑

Region 4 ❑

Region 5 ❑

This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

Date	By: David A. Cole Commissioner
Witness	

Contract Number _____

CONTRACT AGREEMENT, OFFER & AWARD

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

_____

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

_____

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

A. The Work.

The Contractor agrees to complete all Work ordered as specified or indicated in the Contract and Task Order Assignments including Extra Work in conformity with the Contract, for Geotechnical Explorations (Drilling) Projects throughout the State of Maine. The Work includes all drilling, seeding, mulch, planting, construction, and maintenance during construction, warranty as provided in the Contract, and other incidental work.

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

The Department shall have the right to alter the nature and extent of the Work as provided in the Contract; payment to be made as provided in the same. Work will be ordered by a written "Task Order" from the Department. Task Orders will include the quantities of items, location of work, maximum dollar amount, and the time schedule required to complete the work.

B. Time.

The Contractor agrees to complete all ordered Work within the timeframe outlined in the Task Order Assignments This Contract shall be for a two year period from **August 1, 2009 to July 31, 2011**. Warranty work shall be covered under the establishment period as outlined in the Standard Specifications. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of

Maine Department of Transportation Standard Specifications, Revision of December 2002.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the low bidder only. However, unit prices will be used for assigning work under this contract.

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

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

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.

2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.

3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined specifications of work, the Plans, Standard Specifications Revision of December 2002, Standard Details Revision of December 2002 as updated through advertisement, Supplemental Specifications, Special Provisions, Contract Agreement; and contained herein for construction of: Various Geotechnical Explorations (Drilling) services throughout the State of Maine, on which bids will be received until the time specified in the "Notice to Contractors" do(es) hereby bid and offer to enter into this contract to supply all the materials, tools, equipment and labor to construct the whole of the Work in strict accordance with the terms and conditions of this Contract at the unit prices in the attached "Schedule of Items", for each individual Region.

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

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

Second: To begin and complete the Work on the date specified in the contract Administrator's "Task Order Assignment" and complete the Work within the time limits given in the Special Provisions of this Contract.

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

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

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

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

CONTRACTOR

Date	(Signature of Legally Authorized Representative of the Contractor)
Witness	(Name and Title Printed)

G. Award.

Your offer is hereby accepted for (see checked boxes) at the cost per unit prices as outlined in the corresponding "Schedule of Items".

Region 1 ❑

Region 2 ❑

Region 3 ❑

Region 4 ❑

Region 5 ❑

This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

Date	By: David A. Cole Commissioner
Witness	

CONTRACT AGREEMENT, OFFER & AWARD

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

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

A. The Work.

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

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

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

B. Time.

The Contractor agrees to complete all Work, except warranty work, on or before **November 15**, 2003**.** Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, Revision of December 2002.

C. Price.

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is **(Place bid here in alphabetical form such as One Hundred and Two dollars and 10 cents)** **$ (repeat bid here in numerical terms, such as $102.10)** Performance Bond and Payment Bond each being 100% of the amount of this Contract.

D. Contract.

This Contract, which may be amended, modified, or supplemented in writing only, consists of the Contract documents as defined in the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

E. Certifications.

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

1. All of the statements, representations, covenants, and/or certifications required or set forth in the Bid and the Bid Documents, including those in Appendix A to Division 100 of the Standard Specifications Revision of December 2002 (Federal Contract Provisions Supplement), and the Contract are still complete and accurate as of the date of this Agreement.

2. The Contractor knows of no legal, contractual, or financial impediment to entering into this Contract.

3. The person signing below is legally authorized by the Contractor to sign this Contract on behalf of the Contractor and to legally bind the Contractor to the terms of the Contract.

F. Offer.

The undersigned, having carefully examined the site of work, the Plans, Standard Specifications, Revision of December 2002, Standard Details Revision of December 2002, Supplemental Specifications, Special Provisions, Contract Agreement; and Contract Bonds contained herein for construction of:

PIN 1234.00 West Eastport, Hot Mix Asphalt Overlay,

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

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

As Offeror also agrees:

First: To do any extra work, not covered by the attached "Schedule of Items", which may be ordered by the Resident, and to accept as full compensation the amount determined upon a "Force Account" basis as provided in the Standard Specifications, Revision of December 2002, and as addressed in the contract documents.

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

Third: To begin the Work on the date specified in the Engineer's "Notice to Commence Work" as stated in Section 107.2 of the Standard Specifications Revision of 2002 and complete the Work within the time limits given in the Special Provisions of this Contract.

Fourth: The Contractor will be bound to the Disadvantaged Business Enterprise (DBE) Requirements contained in the attached Notice (Additional Instructions to Bidders) and submit a completed Contractor's Disadvantaged Business Enterprise Utilization Plan by 4:30pm on the day of bid opening to the Contracts Engineer.

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

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

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

CONTRACTOR

_____ **(Sign Here)**

Date (Signature of Legally Authorized Representative of the Contractor)

____(**Witness Sign Here)** **(Print Name Here)**

Witness (Name and Title Printed)

G. Award.

Your offer is hereby accepted. This award consummates the Contract, and the documents referenced herein.

MAINE DEPARTMENT OF TRANSPORTATION

Date By: David A. Cole, Commissioner

(Witness)

APPENDIX A
SPECIFICATIONS OF WORK TO BE PERFORMED
(BORINGS)

INTRODUCTION:
This Contract is for geotechnical drilling work as defined herein for statewide projects specified by the Department on a Task Order basis.

ARTICLE 1—SCOPE OF WORK:

1. Definitions

1.1. **Contract Administrator** - The Department assigned administrative representative. Through his/her office all administrative contractual directives and interpretations will be communicated to the Contractor. When the Inspector is unavailable, the Contract Administrator may act in the Inspector's contractual role.

1.2. **Driller** - The authorized onsite representative of the Contractor. This person directs and performs the work for the Contractor.

1.3. **Inspector** - The Department assigned onsite representative. Through his/her office all directives will be communicated to the Contractor. In the absence of directives from the Inspector, the Contract Administrator will provide directives. All specific judgmental decisions not given to the Contractor in this Contract, or for which the Contract is silent, will be made through the Inspector or the Contract Administrator.

1.4. **Task Order-** The letter of assignment sent to the Contractor indicating the location and time frame of the work to be done, schedule for completing the work, project identification number (PIN), items, quantities needed to complete the work, and a maximum amount of funds allotted to complete the work.

2. Contractor Qualifications and Supervision

2.1. **Driller Qualifications**

The Driller shall be skilled in soil/rock exploratory drilling methods. The Driller of each boring crew shall be responsible to assist in the determination of changes in the soil by recognizing visual changes in auger or wash boring cuttings, and/or changes in drill equipment response. The Driller shall advise the Inspector of any changes in soil strata or drilling conditions. The Driller shall also be competent to identify the recovered soil samples in accordance with the 1988 AASHTO Manual of Subsurface Investigations. The Driller shall be fully qualified in performing Standard Penetration Test (SPT) sampling and testing, spoon samples, tube samples, and other undisturbed sampling, vane shear testing, rock coring and installation of observation wells, also when working on environmental borings the drill crew shall have at a minimum of 40 hours of OSHA Hazardous Training plus an annual 8 hour OSHA Hazardous Training Refresher Course.

If in the opinion of the Inspector or Contract Administrator the Contractor fails to provide qualified and experienced personnel who can perform the necessary services, then the Contractor**,** at no additional cost to the Department, shall provide qualified personnel capable of performing this work within 24 hours.

2.2. **Supervision**

The exploratory work shall be performed under the supervision of the Inspector. In general, no subsurface exploratory work shall be done in the absence of the Driller or the Inspector. The Contractor shall notify the Inspector or Contract Administrator at least twenty-four hours before commencing work.

3. Conducting the Work

After commencing operations, the Contractor shall work continuously to complete the work, unless authorized by the Department to suspend work. If the Contractor is authorized to suspend work for their own convenience, any mobilization or other related expenses shall not be charged to the Department. The Contractor shall prosecute the work in a neat, orderly, efficient, and diligent manner, and shall employ whatever methods are necessary to accomplish the work efficiently and in the shortest time possible.

The work may include borings in soil and bedrock, obtaining and preserving the integrity of acceptable soil and rock samples, installation of observation wells, and delivery of the samples as required by the Department. The soil portions of these borings may be advanced by drive and wash casing, spun casing, hollow stem augers, solid stem augers, or coring, at the discretion of the Department. The bedrock portions of these borings may be advanced by a double tube core barrel with a non-rotating inner tube having a minimum diameter of 1-7/8 inches (NQ) outside diameter (O.D.).

The Contractor shall take precautions necessary to prevent damage to existing structures and conduits both above and below the ground, and to lawns, walks and pavements. Any damage to such pavements, utilities, or private property that the Department determines has resulted from the Contractor's negligence or carelessness shall be promptly repaired to the satisfaction of the Department. Utility notifications with DigSafe System, Inc. and other local utilities not covered by DigSafe shall be the responsibility of the Contractor unless otherwise stated in the individual project Task Orders.

The Department shall approve the location of all stationary and mobile drilling equipment at the worksite. Upon completion of the Contractor's operations at each site, the Contractor shall remove its equipment and clear the area of all debris. All casings shall be withdrawn from drill holes or driven flush with the roadway surface as required by the Department.

The Department reserves the right, at any time during the life of the Contract, to determine the order in which remaining borings are taken, to eliminate borings from or add borings to and to increase or decrease the depth of any or all borings that were initially provided by the Inspector.

4. Inspecting the Work

The Inspector or the Contract Administrator shall describe the drilling site and planned exploration program to the Contractor. The Contractor shall examine the site to determine if there are any questions about the site or drilling program. The Contractor and the Inspector or Contract Administrator shall resolve any issues prior to the issuance of the Task Order assignment and the Contractor starting the work. The Contractor will commence work on the project on the date agreed to by the Contract Administrator and the Contractor as stated in the Task Order.

All of the work making borings, taking samples, and the storing and disposing of samples, shall be in accordance with the requirements of these specifications and the direction of the Department and will be inspected by the Department at its discretion.

5. Safety

When working in the Department's right of way, a minimum of 12 traffic cones are to be used to protect the immediate work area and the Contractor's vehicles. The Inspector has the right to suspend the work if these safety devices are not provided and used by the Contractor. The Contractor shall not receive additional compensation for such suspensions.

6. Technical Requirements

6.1. General

The work to be done under this Contract consists of mobilization on land, water, and on railroad property, advancing auger and/or cased-hole borings, conducting rock core borings, obtaining and preserving the integrity of acceptable soil and rock samples, performing in-situ tests (e.g. Standard Penetration and vane shear tests) and installing observation wells for Department projects. Breaking through pavements, bridge decks, sidewalks, frost line, ice, etc. and mobilization on water will not be considered extraordinary site preparations.

All work done under this Contract shall be in conformance the 1988 AASHTO Manual for Subsurface Investigations, current AASHTO standards, current ASTM standards, the specific conditions of this Contract, and site-specific requirements. The soil/rock exploratory drill methods described in the Technical Requirements section of this Contract are intended as a guide to the typical aspects of the work. The Inspector or Contract Administrator will direct the Contractor regarding specific project requirements.

The Inspector will provide the Contractor with the locations and requirements for soil borings. The Contractor can only change boring locations and depths after having received authorization or direction from the Inspector. The Contractor shall confine his operation as closely as possible to each location where work is to be performed.

The Contractor shall complete the borings to the specified depths. Borings abandoned before reaching the required depth due to obstruction or other reasonable cause, not permitting completion of the boring by standard procedures, shall be replaced by a

supplementary boring adjacent to the original and carried to the required depth. Samples shall be taken in the supplementary borings from the elevation at which the original boring was abandoned. The Inspector will be required to prepare a boring log for all abandoned test borings as well as those extended to the required depth. The Department makes no representation as to the character of the subsurface soil conditions through which the borings are to be advanced, or that any boring locations will be found free of obstructions.

Some borings may require cutting trees and vegetation for access and maneuvering. Such cuttings shall be kept to the absolute minimum. The Contractor shall collect all cuttings caused by their operations and in accordance with instructions by the Inspector, distribute the brush portions of the cuttings in neat piles over the disturbed area and stack the wood portion in locations designated by the Inspector after the trees are cut into log lengths. Payment for these services shall be paid for at the contract hourly rate for "Drill Rig for Land".

When the work at each land borehole is completed, the hole shall be blocked and solidly filled in a manner to preclude any possibility of damage to property. Special provisions for backfilling boreholes on railroad property shall conform to railroad requirements. Boreholes within the limits of travel ways, shoulders, sidewalks and paved areas shall be backfilled and compacted with granular materials and brought to the grade of the adjacent surface and match the existing thickness of bituminous concrete or cement concrete, whichever is applicable. No separate compensation will be made for backfilling boreholes.

The Driller shall mobilize to the site, and continuously utilize all material and equipment necessary to make the borings and observation wells, in-situ tests and other probes as required under this Contract. All such equipment and material shall be staffed and maintained in a condition acceptable to the Department from the commencement to the completion of the work. The Driller shall be responsible for utilizing the equipment to insure that the boring will maintain alignment, plumbness, and roundness during installation. The Contractor shall use only contaminant free drilling tools while boring. Any drilling tools or tools used down-hole shall be steam-cleaned before entering the site if the Contractor knows these tools may have been previously contaminated.

Some borings may require mobilizing and dismantling test boring equipment at railroad and highway structures, on railroad and highway embankments, rights of way and water bodies. The Contractor may also be called upon to mobilize their equipment off the traveled way, in water areas, wooded areas, and other difficult areas where directed by the Contract Administrator or Inspector. All borings shall be made where called for.

6.2. **Equipment**

The borings shall be made using heavy-duty drilling equipment of a size and type designed to drill holes of the sizes and to the depths required in this Contract. Drill rigs shall have adequate capacity and power. They shall be specifically designed and

manufactured for drilling, coring, and sampling soil and rock. Drill rigs with automatic hammers or hydraulic winch hammers shall undergo annual energy measurement testing in accordance with ASTM D 4633-05 "Standard Test Method for Energy Measurement for Dynamic Penetrometers". The testing is the responsibility of the Contractor and shall be performed by a qualified, dynamic testing company. The Contractor's proposed site for the energy measurement testing shall be pre-approved by the Department. The preference is for energy measurement testing to be conducted at sites with predominantly sandy subsurface conditions. Tests are not valid when performed in soils that are predominantly clay, silt or gravel. A boring log shall be kept by a qualified subsurface inspector for each boring in which energy measurement testing is performed. The Contractor shall provide the Department with a copy of the energy measurement report within 30 days of the test being performed, with all data required by ASTM D 4633-05 and with a copy of the boring log, for each automatic and hydraulic winch hammer system that will be used for the Department.

Drilling units shall be equipped with a hydraulic feed. Drill rigs and tools that are not adequate in the opinion of the Department, will not be allowed. The Contractor shall provide casing and/or augers in quantities and sizes adequate for expeditious performance of the work. The Contractor shall not be compensated for time required to bring additional equipment and/or materials to the worksite that the Inspector determines were initially required to perform the work. The Department reserves the right to reject the use of any Contactor provided items it determines are unsatisfactory for carrying out the work.

Prior to each project Task Order, the Contract Administrator will describe the work and will advise the Contractor of the required equipment. This advice shall not excuse the Contractor from providing and using the necessary equipment to perform the work. The Driller may use drilling fluids other than water only in those cases where it receives specific authorization from the Inspector. Precautions shall be taken to minimize spillage of any fluids or debris.

When the Task Order requires drilling on water the Contractor shall provide a barge, a means for moving it from boring site to site and a crane for loading the rig and equipment onto and off the barge.. The barge shall be of sufficient size to safely carry the Contractor's drill rigs, crew, equipment, and the Inspector. The barge shall be set up in such a way as to be easily positioned on the required boring locations. The Contractor shall provide sanitary facilities for the crew and the Inspector. The crane shall be of sufficient size to safely swing the equipment and/or barge into position on the water.

6.3 Reports and Records

The Department and its representatives shall have access to the work at all times. All work performed by the Driller shall be in accordance with the 1988 AASHTO Manual of Subsurface Investigations, current ASTM standards, the conditions of this Contract, and the requirements of the Department. . All drilling shall also be logged by a representative of the Department who will be present to observe the Driller's

work throughout their activity on the site. All information required for the completion of the log shall be provided to the Inspector by the Contractor during the drilling activities.

The Contractor shall provide access to the boring so that the Inspector can complete the log. Each boring log by the Inspector shall contain the following information:

a) Boring or probe number, date(s) boring was commenced and completed, the project location, the project name, the Project Identification calcareous, SILTSTONE, (Kittery Formation).Number (PIN), the Driller's name, and the Inspector's name.

b) Rig type and number, hammer type and actuation method, hammer energy transfer based on annual calibration, date of calibration, drilling method, borehole diameter.

c) Elevation of the ground surface and the coordinate at the boring. If coordinates are not available, the as-drilled location shall be determined by taped measurements from landmarks, and a sketch shall be provided.

d) Depth below ground surface of each stratum of soil or rock encountered.

e) Description of each stratum of soil or rock encountered in accordance with the 1988 AASHTO Subsurface Investigation Manual, including the character of the material and its degree of compactness; Rock Quality Designation (RQD) for each length of rock core obtained; core drilling time interval to drill each 1 ft increment of rock core.

f) Depth to the ground water table and the length of time after completion of the boring when measured. Also, record the daily water level readings, time when taken, and the casing depth at the time of the reading.

g) Depth at which drilling fluid was lost if such loss occurs, amount of loss, and range of depth over which loss occurred. Similar data shall be recorded if artesian conditions occur.

h) Depth at which soil and rock samples were taken, and type of sample, sampler details, sample recovery, and penetration.

I) All blow counts recorded during the standard penetration test, as specified, and length of recovery in tenths of feet; blow counts for casing advancement.

j) Comments by the Driller covering any special conditions that were encountered.

k) Location of the screened zone of each observation well if required, the depth range over which the well is sealed, and a list of materials used in the installation for each well.

l) Information regarding other testing such as thin-walled tubes, vane shear testing, etc., which is relevant to the boring.

7. Soil Borings

The Department intends to use either hollow-stem augers or casing above the bedrock surface. Standard split-spoon samples at 5 foot intervals and at every change in stratum shall be taken as required by the Department. In addition, the Department may require that additional, or continuous, split-spoon samples are taken in strata of particular interest.

The specifications that govern each method are presented in subsequent sections. The Department shall select the method for advancing the borings.

The depth of the static water level in a boring shall be recorded and reported to the Inspector each morning before drilling starts on the hole.

7.1. Borings Advanced by Augering

Augers will have continuous flights and hollow stems to allow for sampling through the auger. The internal diameter of the auger stem will be at least 3.7 inches. The Driller will continue the boring until the required depth, refusal, or the bedrock surface is reached. In the case of a shallow refusal, the Inspector shall decide whether to move the equipment a short distance away and re-drill or to completely terminate the boring. The Driller shall provide access to the borehole to permit the Inspector to record the estimated water level in the hole, to log the soils penetrated and the depth to refusal, if encountered, at the completion of each hole.

Some areas along proposed routes may have shallow surficial soils. The Contractor will conduct solid stem auger probe borings in these areas at the intervals and depths as required by the Department. The outside diameter of the solid stem auger will be at least 4.5 inches. The Driller shall provide access to the probe hole to permit the Inspector to record the estimated water level in the probe, to log the soils penetrated and the depth to refusal, if encountered, at the completion of each probe.

7.2. Borings Advanced by Casing

Cased borings shall be advanced by driving or spinning the casing to the required depth, and sampling will be as described in the section entitled "Split-Spoon Sampling." Washing ahead of the casing may be permitted if approved by the Department. The Contractor is responsible for providing an acceptable water source for drilling activities.

Casing shall have a minimum outside diameter (O.D.) of 4.5 inches. With approval from the Inspector, casing having an O.D. of 3.5 inches may be used. The Contractor shall drive the casing with a free falling drop hammer weighing 300 lb, and falling 16 inches or an automatic hammer. Casing shall be driven into soil in five-foot intervals. After advancing the casing 5.0 feet, the Contractor shall wash the soil material out of the casing.

Each boring shall be advanced by using a cutting bit or by coring soil. Drilling fluid shall be forced down through the drill pipe and out through ports in the bit to carry the cuttings up and out of the boring. Water ports in the cutting bit shall be arranged so that there is no jetting action of the drill water ahead of the bit, and the minimum amount of water necessary to carry away the cuttings shall be used. A bottom-discharge bit will not be permitted, except in the case of a tricone bit. Jetting through an open-tube sampler and then sampling when the desired depth is reached shall not be permitted.

8. Soil and Rock Sampling Methods

8.1. Split-Spoon Sampling

The Driller shall notify the Inspector about drilling conditions that might indicate any change in stratification and will obtain representative samples at the depth and elevation of each stratum change as it exists in the ground, including its moisture.

Samples shall be taken using a 1-3/8 inch I.D. by 2 inch O.D. split-barrel sampler, as described in ASTM D 1586. The bottom of samplers shall be sharpened to form a cutting edge at its inside circumference. The cutting edge shall be maintained in good condition and replaced as required by the Department. The sampler shall be fastened to its drive pipe by a connection with a check valve that will permit the escape of water that is trapped above the sample as the sampler is driven into the soil, but that will close as the soil sample and sampler is withdrawn. The check valve should be inspected at frequent intervals to insure that it is clear of mud or soil and remains in satisfactory working order.

The drive weight assembly shall consist of a 140 lb weight, a driving head, and a guide permitting a free fall of 30 inches. The Department may require that the Driller provide a certificate describing the last date when the weight was weighed on a State-certified scale. Precautions shall be taken to ensure that the weight falls freely between the guides.

For standard sample borings, split-spoon samples shall be taken at every change of stratum and within a continuous stratum at intervals not exceeding every 5 feet, or as directed by the Department. For continuous sample borings, split-spoon samples shall be taken at intervals of 2 feet.

The following procedures shall be used in taking split-spoon samples and measuring the penetration resistance of the soil sampler in accordance with ASTM D 1586. The boring shall be cleaned out to the sampling elevation with equipment that will ensure that the material to be sampled is not disturbed by the operation. Where casing is used, it shall not be driven below the top of the sampling elevation. The drill bit shall be withdrawn very slowly to prevent loosening of the soil around the casing. The water level in the boring shall be kept at the top of the casing at all times during the boring operation.

With the sampler resting on the bottom of the hole, mark the drill rods in 4 visible 6 inch increments. Do not seat the sampler with the hammer. The sampler shall be driven with blows from the 140 lb hammer falling 30 inches until either 18 inches have been penetrated (except in the case of continuous sampling where 24 inches shall be penetrated) or 100 blows have been applied over a 6-inch drive.

For each sample, the number of blows required to effect each 6 inches of penetration or fraction thereof shall be recorded by the Inspector. The first 6 inches is considered to be the seating drive. The sum of the number of blows required for the second and third 6-inch penetrations is termed the N-value and is the blow count representation of the penetration resistance of the soil. If the sampler is driven less than 18 inches, the log shall state the number of blows for each 6-inch interval and/or the number of blows and the number of inches penetrated. Should an obstruction be encountered during split-spoon sampling, the Inspector may require the Contractor to obtain an additional sample once the obstruction has been passed.

The sampler shall be withdrawn very slowly so that a minimal head of drilling fluid will exist inside the rods, and so that there will be minimal suction created at the bottom of the sampler that will tend to cause loss of sample.

After the sampler is brought to the ground surface, the sample shall be carefully removed. The top of the sample will generally be disturbed due to the cleaning out of the casing and shall be discarded. Representative samples of each different type of soil shall be retained. Each part shall be placed immediately in airtight containers without ramming. Each container shall be labeled with the date, location and name of project, project PIN, boring number, sample number, its depth below ground surface at the boring, sample recovery in tenths of feet, all blow counts, and personnel initials. If more than one type of soil is found in the sampler, for instance, part sand and part clay or alternating layers of such soils, the thickness and description of the individual layers shall be recorded in the log and representative samples of each soil type shall be placed in separate containers. The sample number, depth, and blow counts given on each container shall correspond to that portion of the sample contained in it. A jar shall be labeled for each sample attempt. If there is no recovery, it should be noted on the jar.

If a minimum recovery of 4 inches is not obtained, the Driller shall immediately attempt to take a second sample before sinking the casing to a greater depth. Overdriving the spoon to ensure sample recovery will be permitted only upon approval of the Department.

Practical refusal shall mean failure of the sampler to penetrate at least 12 inches when driven 120 blows using a 140 lb weight free-falling 30 inches. In each case, the Inspector shall determine that a Practical refusal actually has been encountered. A Practical refusal will not be accepted as the termination of a borehole above the depth required by the Inspector. When the resistance to penetration with soil boring tools, as defined as Practical refusal, is encountered above the required termination depth, the borehole shall nevertheless be made to the required termination elevation. Should

bedrock be encountered above the required termination depth, the borehole shall be completed as directed by the Inspector or Contract Administrator.

The variability in N-values produced by different drill rigs and operators is quantified by measuring hammer energy transferred into the drill rods and sampler and adjusting the N-value on the basis of measured energies. All drill rigs are required to undergo annual energy measurement testing in accordance with ASTM D 4633-05.

8.2. **Thin-Walled Tube Sampling**

The purpose of this type of sampling is to acquire relatively undisturbed soil samples for laboratory testing. Thin-walled tube samples may be required in the boring, at intervals designated by the Department. The need for thin-walled tube samples will be determined during drilling activities. The Driller shall conduct thin-walled tube sampling in accordance with the procedures and equipment described in ASTM D 1587, "Thin-Walled Tube Sampling of Soils." Sample tubes shall have a 3-inch O.D., be made of 16 gauge steel, and be at least 18 inches in length unless otherwise designated by the Department. The front edge shall be beveled for cutting a reduced diameter sample to reduce friction. The tube shall be free of all scale or other deleterious material. Tubes with rusted surfaces shall not be used.

Prior to obtaining undisturbed samples, the Driller must remove any loose soil in the borehole. Care should be taken to maintain a full head of water in the casing during all drilling operations, including extraction of drill rods, preceding undisturbed sampling. The sample tube shall be pushed a minimum of 18 inches but not more than the total tube length. The sampler shall be pushed into the soil by a rapid, continuous movement without rotation. The Inspector shall record, in the log, the depth to which the tube was pushed or driven and the length of the recovered sample.

A rest period of not less than 15 minutes is required prior to withdrawing the sampler. The loaded tube shall then be rotated by turning the top of the drill rod 2 complete revolutions. The Driller must withdraw the sampler from the formation as carefully as possible to minimize disturbance of the sample. The sample tube shall be immediately capped, taped, and sealed with wax to prevent moisture content change. Before sealing the tube, the Department may wish to trim back the sampled soil in the ends of the tube to perform pocket penetrometer or Torvane tests or to remove disturbed soils. The Driller must protect the samples from freezing and excessive heat until the Department collects the samples. The Driller shall clearly mark the sample tubes with project name depth, boring number, project number, sampler number, inches of recovery and date.

When undisturbed samples are taken over water, the Contractor shall have the necessary equipment to properly obtain undisturbed samples on water.

Tubes shall be handled and transported in accordance with ASTM D 1587. Tubes shall be maintained in a vertical, upright position at all times and shall be protected from vibration, shock, excessive heat and freezing. Tubes shall be transported in the

vertical position in a wood-framed box fashioned with openings and padding for multiple tubes.

8.3. **Vane Shear Test**

The in-place shear strengths of cohesive soils shall be measured by means of field vane shear tests using Geonor vanes. The Department shall provide the required vanes, rods and torque wrenches. In place vane shear tests shall be performed using a calibrated torque wrench with a memory dial gage. The Contractor shall perform the boring related work, and the Inspector shall perform the vane shear test. In general, vane dimensions shall comply with ASTM D 2573, but the Department may use other vane sizes at its discretion.

When performing the vane shear test a full column of water shall be maintained in the casing as the drill tools are extracted. This head pressure shall be maintained throughout the soft soil strata sampling and testing to minimize disturbance and maintain sample integrity. In some instances, drilling mud can be used to replicate the weight of the soil column removed in the casing with the approval of the Inspector.

At the direction of the Inspector, the vane shear test shall be performed at depths of 1 and 2 feet below the bottom of casing before sampling with the SPT spoon. In the case of thin-walled tube sampling, vane shear testing 1 and 2 feet below the tube-sampling interval shall be conducted. The SPT spoon shall be advanced through the vane interval (and overdriven up to 1 foot) after the vane test to collect a soil sample. The rate of vane rotation during the vane shear test shall be at a rate of about 1 minute per quadrant (90 degrees). Generally this produces failure in less than one minute.

Following the determination of the maximum torque in the undisturbed soil the remolded shear strength shall be determined in the same manner after rapidly rotating the drill rods 10 revolutions. The determination of the remolded strength should be started immediately after completion of the rapid rotation remolding process.

During the vane shear test, the applied maximum torque shall be noted on the boring log. The maximum torque shall be recorded in foot-pounds. If vane equipment other than that approved by MaineDOT is used, a complete description of the apparatus and detailed dimensions of the vane shear tool shall be submitted with the test report.

The Inspector shall note on the logs events such as being unable to push or drive the vane into the soil below the bottom of the hole after lowering the drill rods and vane to the required depth, or if s/he is unable to rotate the vane to determine the maximum torque due to the stiffness of the soils or due to an obstruction.

When the vane shear testing is complete, the Contractor shall advance the borehole in the usual manner.

8.4. **Rock Core Sampling**

Except as indicated below, rock shall be drilled and cores recovered, stored and transported in accordance with ASTM D 2113 and ASTM D 5079 "Routine Level" of care. This type of sample is obtained after the casing has been sealed on the bedrock to prevent loose material from entering the casing, and to prevent the loss of drilling fluid, regardless of the type or types of material encountered. Core samples in bedrock shall be accomplished by the diamond bit rotary drilling method. The minimum length of coring shall be 10 feet unless otherwise directed by the Inspector.

Core barrels shall be double tube type with non-rotating inner barrels of the Acker M series or Christensen C or D series, or as approved by the Department. The Driller shall use such equipment and procedures that HQ 2 ½ inch O.D., NQ 1-7/8 inch O.D., or NX 2-1/8 inch O.D. core samples can be obtained in all rock borings. The minimum diameter of acceptable core shall be NQ. Smaller core diameter sizes shall be used only if approved by the Inspector. Cores shall be pulled at intervals not exceeding 5 feet unless the Inspector authorizes longer runs. Core shall be pulled at the first sign of blockage or grinding. Every effort and precaution shall be made by the Driller to ensure the best possible recovery and preservation of the rock cores. If core recovery is poor, the Driller shall make every effort to improve the recovery and sample quality by changing bit types, shortening runs, altering drilling rates, altering down pressure, increasing drilling fluid circulation, or whatever other methods are required. The Department shall decide whether core is required for a particular boring, prior to commencing the hole so that an appropriate casing size is used. Cutting oil will not be used.

If core borings penetrate soil-filled seams, joints or cavities, where there is a sudden increase in the rate of drill penetration, the Driller shall notify the Inspector, and the Inspector may direct the Driller to withdraw the coring tools from the hole, and an attempt may be made to sample the zone using a split spoon sampler.

The core obtained in each drilling operation shall be packed, labeled and transported as described in section 8.5.

Special care shall be taken to locate and note the depth and thickness of all clay or mud seams or cavities. These shall be clearly shown in each box and on the drilling log. Wherever a core is lost or at any known seam or cavity, a spacer shall be placed in the proper relative position in the core box. The spacer shall be the length of the core lost or the length of the missing core and the nature of the missing segment noted thereon (e.g., "lost core", "cavity", etc.). Any core which is removed from the box for testing or other purposes shall be replaced by a spacer, equal in length to the removed core, marked with the date, purpose, and name of the party responsible for the removal. No core shall be removed from the box prior to the completion of geologic logging, and no core shall be removed at any time without the written permission of the geotechnical engineer in charge of the investigation. Wooden blocks, marked with the appropriate depths in feet and tenths, shall be inserted between each pull of core. The marking system shall be consistent for all borings, both for the logs and boxes used for core. The Department may request the Contractor to deliver core boxes to the Department's Central Laboratory in Bangor.

The Inspector's log shall include the following items: boring number; date; project name; PIN; depth to top of start of coring; type of core barrel used; length of each drilling run; location of known seams or cavities; percent recovery for each drilling run; RQD; the time required to drill each 12 inch depth; the depth at which drilling water was lost (if any), the amount of loss (if any), the range of depth over which the loss occurred (if any); and the depth at which the water is regained (if any). Artesian conditions shall be recorded in a similar manner. The depth of static water level in a hole shall be recorded and reported to the Department each morning before drilling starts on the hole.

8.5. Packing, Labeling and Shipping Soil and Rock Samples

Each split spoon sample shall be sealed in a sample jar as soon as it is removed from the ground, and packed so that it will reach the laboratory in a condition that is as near as possible as that in which it was removed from the ground, without loss of water by evaporation or damage by breakage of containers, or other disturbance in transit. The Contractor shall provide the Inspector with packaging for samples.

Unless otherwise directed by the Department, soil sample containers shall be 16 oz. clear glass jars and have a mouth diameter of 3 inches. Containers that are too large and permit undesirable disturbance of the sample in transit shall not be used. The Department will collect the samples at the site or direct the driller to ship the samples to some location. The Driller shall provide temporary storage for the samples at the site and protect them from freezing and excessive heat.

The airtight containers used to store the split-spoon samples shall be packed in cardboard boxes designed for this purpose. Whenever possible, only samples from one boring should be placed in each box. These boxes should be handled carefully to prevent breakage of the airtight containers during shipment and to prevent freezing or excessive heating of the samples.

Thin-walled tubes shall be prepared for shipping using the method described in the section entitled "Thin-Walled Tube Sampling." Tubes shall be handled and transported in accordance with ASTM D 1587.

At the request of the Department, the split-spoon and rock core samples shall be shipped by the Driller to the storage facilities designated by the Department. All sample containers should be protected from vibration, freezing temperatures and excessive heat while in the custody of the Driller.

Rock core obtained in each drilling operation shall be placed in wooden or metal boxes, divided into separate compartments. Each compartment should have the interior length and width of the core obtained. Separate boxes shall be used for each project. Core box covers shall be hinged and shall secure closed with two hooks and eyes. Core obtained shall be placed in these boxes in such a manner that the various strata are in the same relative position in the core boxes as they were in the ground.

The order of placing core shall be the same in all boxes, progressing from the shallowest core at the upper left on the hinge line to the deepest core at the lower right, as with the sequence of words on a printed page. Using wooden blocks as spacers, the top end of each core, and the bottom of the last core, shall be clearly and permanently marked with its depth in feet and tenths of feet written on the wooden blocks in permanent ink. The inside of each box shall be marked on top with the project, PIN, boring number, date of run completion, core depths, recovery, and RQD. Both ends of the boxes shall be marked with the boring number, PIN, and project name.

9. Observation Wells

9.1. General

Ground water observation wells may be installed by the Driller in borings as directed by the Department. The exact depths will be determined in the field by the Department.

Observation wells will be installed in cased boring holes or hollow-stem augers. Installation may require backfilling of the boring with clean sands to the desired observation well elevation.

9.2. Materials

The following materials may be required for installation of an observation well. The particular combination of materials to be used will be determined by the Department in the field, and shall be incidental to the contract pay items.

a) Washed concrete sand; less than 3% passing No. 200 mesh sieve; grain size approximately 0.4 to 2 mm or standard 20/40 Ottawa sand (ASTM Designation C190).

b) Clean, bank-run, well-graded coarse to fine sand; less than 3% passing No. 200 mesh sieve.

c) Bentonite balls or chips; Volclay KWK No. 33 or equal.

d) Slotted Pipe; at each well location: 3/4 inch I.D. of Schedule 40, threaded joint PVC screen with 0.010 inch slot size in 5 foot lengths and one cap for the bottom of each 5 foot screen length.

e) Riser Pipe; at each well location: 3/4inch I.D. of Schedule 40, threaded joint PVC pipe in lengths convenient for the Driller to use with one cap for the top of each observation well.

f) Surface Casing (road box) or Protective Casing; The road box is made up of steel protector pipe 12 inches long (minimum) and 4 inch I.D. having a steel shoulder and threaded 6 inch O.D. cap that locks in place. The protective casing is made up of a 4

inch I.D. steel pipe, 7 feet long, and equipped with hinged caps and hasps, with a lock.

9.3. **Installation**

In selected borings, observation well(s) may be installed at the depth(s) designated by the Department. Installation may require backfilling of the boring with clean sands and other materials to the desired well elevation.

The installation of the observation well shall proceed as follows:

a) Pour enough medium sand into the casing to obtain 1 foot of thickness and wait until it settles to the bottom of the borehole. If the observation well is being installed above the surface of bedrock, bump out the casing/auger an amount equal to the thickness of the sand placed. The depth to the top of the sand shall be measured.

b) Lower the observation well (a 5 foot length of PVC screen, capped at the bottom, and PVC riser pipe) into the borehole and allow it to rest on the sand cushion described in (a) above. The riser pipe should extend 36 inches above the ground surface unless a road box is required. Special care shall be taken to ensure that all connections are watertight, but PVC cement shall not be used.

c) Pour medium sand into the borehole between the casing and riser pipe in increments of 6 to 12 inches, bumping the casing back after each increment if the observation well is installed above bedrock. Continue this procedure to a height of 12 to 24 inches above the slots in the PVC pipe; agitate and allow the sand to settle. Backfilling shall be accurate, and verified by measurement in increments specified by the Department. Care must be taken to allow adequate time for the sand to settle before a measurement is made.

d) Above the sand layer described in (c) above, place a seal of bentonite, as directed by the Department. The bentonite seal shall consist of a minimum of 12 inches of bentonite balls or chips. The depth to the top of the bentonite seal shall be measured.

e) Above the bentonite seal that immediately overlies the sand pack over the well screen, place coarse to fine sand in 5 foot intervals, then tamp with a drilling rod or other implement to increase compaction. After every 3 lifts of 5 foot sand placement, which shall be coupled with simultaneous bumping back of the casing when the sand reaches the bottom of the casing, a 12 inch layer of bentonite balls or chips shall be placed as described in (d) above.

f) Observation wells will require protection by either a grade level road box or protective casing. When a road box is to be used and the drill casing is within 1 foot of ground surface, the casing shall be removed and replaced with a 4 inch minimum steel protector pipe (road box), which shall extend 1 foot below ground surface. The road box will be cemented in place using sufficient cement to mound the road box 2 inch above grade, prohibiting the detention or inflow of surface water. When a protective casing is to be used, the Driller shall set the height of the casing so that

water level measurements or water sampling may be conducted without difficulty (approximately 36 inches of stick-up).

g) All observation wells shall be left in place and become the property of the Department.

The Contractor shall be responsible for any materials not provided by the Department for the installation of observation wells. These items shall be incidental to the contract pay items.

10. Method of Measurement

Mobilization Land will be measured by the number of authorized mobilizations of boring rigs on land, regardless of type, and shall include preparation for the work, dismantling the equipment, Driller, helper, all equipment, supplies, safety equipment and materials required to perform the work.

Mobilization Water will be measured by the number of authorized mobilizations of boring rigs on water, regardless of type, shall include preparation for the work, dismantling the equipment, Driller, helper, all equipment, supplies, all materials required to perform the work, the rig(s), all personnel, supplies, safety equipment and materials that shall be transported to and from the landside staging area. Payment for crane, barge, equipment for setup, sanitary facilities, and other items necessary for drilling on water shall be incidental to Mobilization Water.

Mobilization Land and Mobilization Water does not apply to moving from boring location to boring location on a work site. This is considered incidental to the Contract unit price for Mobilization Water or Mobilization Land.

The unit of measurement for Drill Rig for Land and Drill Rig for Water shall be the hour. The accepted number of hours will be based on MaineDOT Daily Hour Receipts. The Inspector will record and preserve records of the Contractor's daily time for performing the work on a MaineDOT Daily Hour Receipt, and require the Contractor to verify its accuracy and sign the MaineDOT Daily Hour Receipt.

10. Method of Payment

Drill Rig for Land will be paid for at the bid Hourly Rate. The accepted number of hours will be based on MaineDOT Daily Hour Receipts. Payment is total reimbursement for all resources necessary to perform the item of work during the hours that the item is underway. Observation well materials, drill mud and other materials shall be incidental to the Drill Rig for Land Pay Item.

Drill Rig for Water will be paid for at the bid Hourly Rate. The accepted number of hours will be based on MaineDOT Daily Hour Receipts. Payment is total reimbursement for all resources necessary to perform the item of work during the hours that the item is underway,

including the barge, crane and transportation to and from the site and other materials shall be incidental to the Drill Rig for Water Pay Item.

Inspector-authorized standby time shall be paid at the contracted hourly rate for Drill Rig for Land or Drill Rig for Water. The Contractor shall not be compensated for unauthorized standby time (e.g. breakdowns). The Inspector or Contract Administrator shall have sole authorization in deciding whether standby time shall be paid.

The authorized number of Mobilization Land and Mobilization Water will be paid for at the bid price for these pay items.

For offshore drilling, Maine State Ferry Fees and Standby-Time to wait for Ferries will be reimbursed by the Department.

Payment will be made under:

Pay Items		Pay Unit
659.12	Mobilization, Land	Each
659.121	Mobilization, Water	Each
631.40	Drill Rig for Land	Hour
631.401	Drill Rig for Water	Hour
631.403	Standby Time	Hour

ARTICLE 2—ITEMS PROVIDED AND/OR COMPLETED BY THE DEPARTMENT:

1. Department Provided Resources

The Department shall provide an Inspector, flaggers and traffic control personnel and traffic control signing. The Department shall provide the vanes, rods, and torque wrenches to conduct the tests for field vane shear testing.

2. Contractor Provided Resources

The Contractor shall provide a Driller, a helper and all equipment, tools, supplies and other materials to perform the boring operations in conformance with the Contract requirements. The Contractor will be expected to conduct subsurface borings at a minimum of 8-hour days, 5 days per week unless prior arrangements are made with the Department. The Contractor shall provide sample containers and sample boxes, as described in the "Soil and Rock

Sampling Methods" section of this Contract that are acceptable to the Department. These items are also considered incidental to the drill rig items. The Contractor shall assist the Inspector in gathering soil test data and particularly with field vane shear testing.

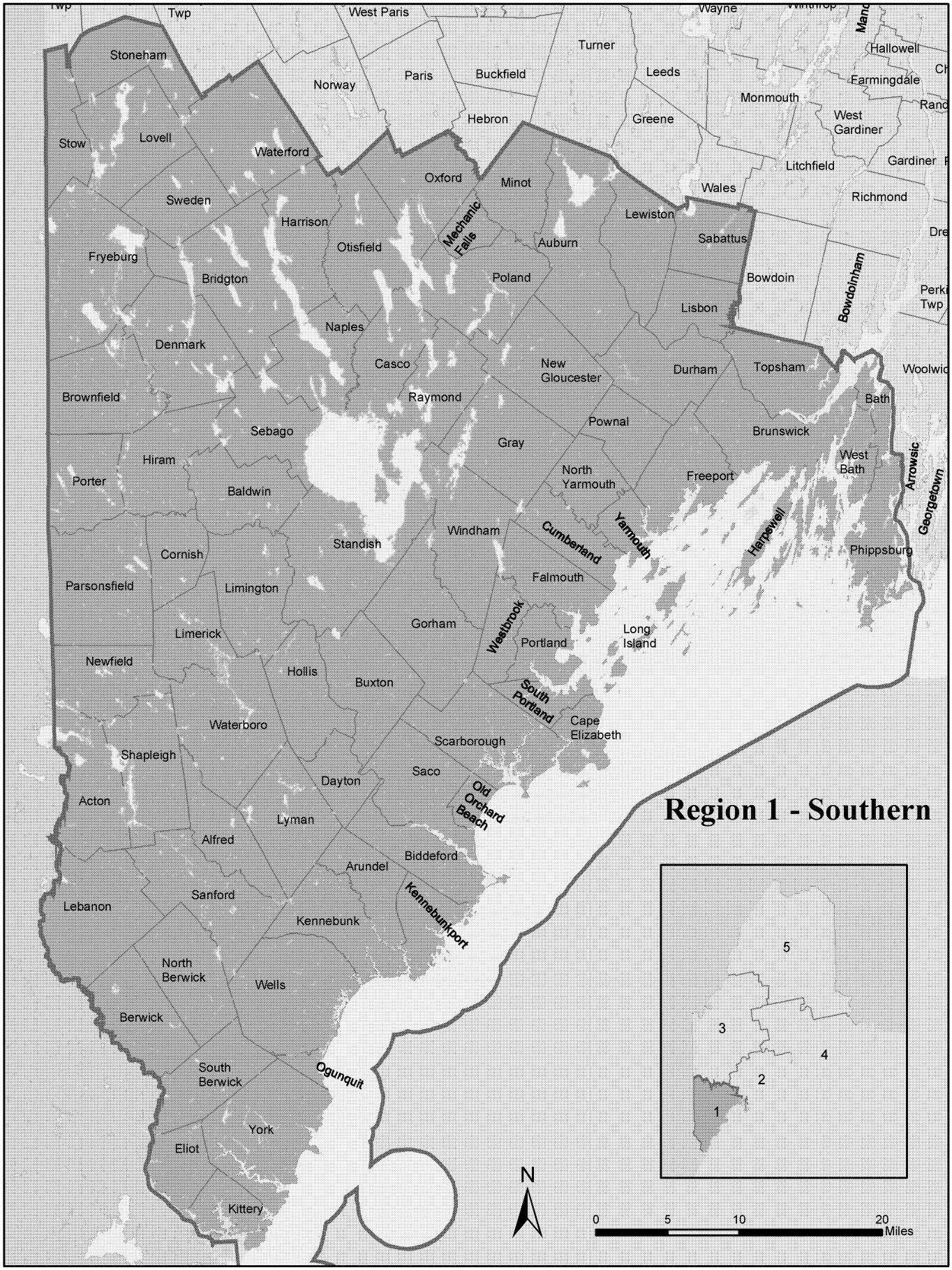
The Contractor may be required to provide more than one rig on a project. The Contractor shall provide up to two drill rigs at any one time if directed by the Inspector or the Contract Administrator. For productivity purposes, preference is for drill rigs with calibrated, automatic hammers. If the Contractor fails to provide sufficient drill rigs, equipment and personnel to perform the work as directed or fails to maintain quality or schedule, such failure may be considered by the Department to be a breach of this Contract.

ARTICLE 3—BASIS OF PAYMENT

The Contract Hourly Rate for each item shall include full compensation for all materials, labor, tools, equipment, consumable supplies, insurance, incidentals, overhead and profit to perform the required work, and for the delivery of properly preserved soil and rock samples in accordance with the requirements of the Contract. The Contract Hourly Rates shall not be paid for travel time to and from the work and lunch periods. Work performed in excess of eight hours per day and on Saturdays and Sundays and holidays shall be paid at the hourly rate. The Contractor shall be paid a minimum four (4) hours per day, but not per job or set-up if several jobs or set-ups are completed in a day.

The Contract Administrator shall have the right to direct the Contractor to provide additional services related to subsurface explorations that are not included in the description of the work items, and the Contractor shall perform these services. The Department and the Contractor shall mutually agree to the payment basis for these services.

Payment shall be made to the Contractor based on its satisfactory performance of the work and submittal of monthly invoice vouchers that are satisfactory to the Department. These invoices shall contain, project number, location of the work covered by the voucher, a description of the work performed for each period being invoiced and a breakdown of the labor and material costs. If more than one project is being invoiced, each project shall be broken down and subtotaled.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Twp
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West Gardiner
Stow
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Waterford
Litchfield
Gardiner
Oxford
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Wales
Sweden
Richmond
Harrison
Lewiston
Mechanic Falls
Sabattus
Fryeburg
Otisfield
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Bowdoin
Bowdoinham
Lisbon
Naples
Denmark
Casco
New Gloucester
Durham
Topsham
Brownfield
Raymond
Bath
Pownal
Sebago
Brunswick
Gray
Hiram
West Bath
Porter
North Yarmouth
Freeport
Baldwin
Arrowsic
Georgetown
Windham
Cumberland
Yarmouth
Harpswell
Standish
Cornish
Phippsburg
Falmouth
Parsonsfield
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Buxton
South Portland
Waterboro
Cape Elizabeth
Scarborough
Shapleigh
Saco
Dayton
Old Orchard Beach
Acton
Lyman
Alfred
Biddeford
Arundel
Sanford
Kennebunkport
Lebanon
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North Berwick
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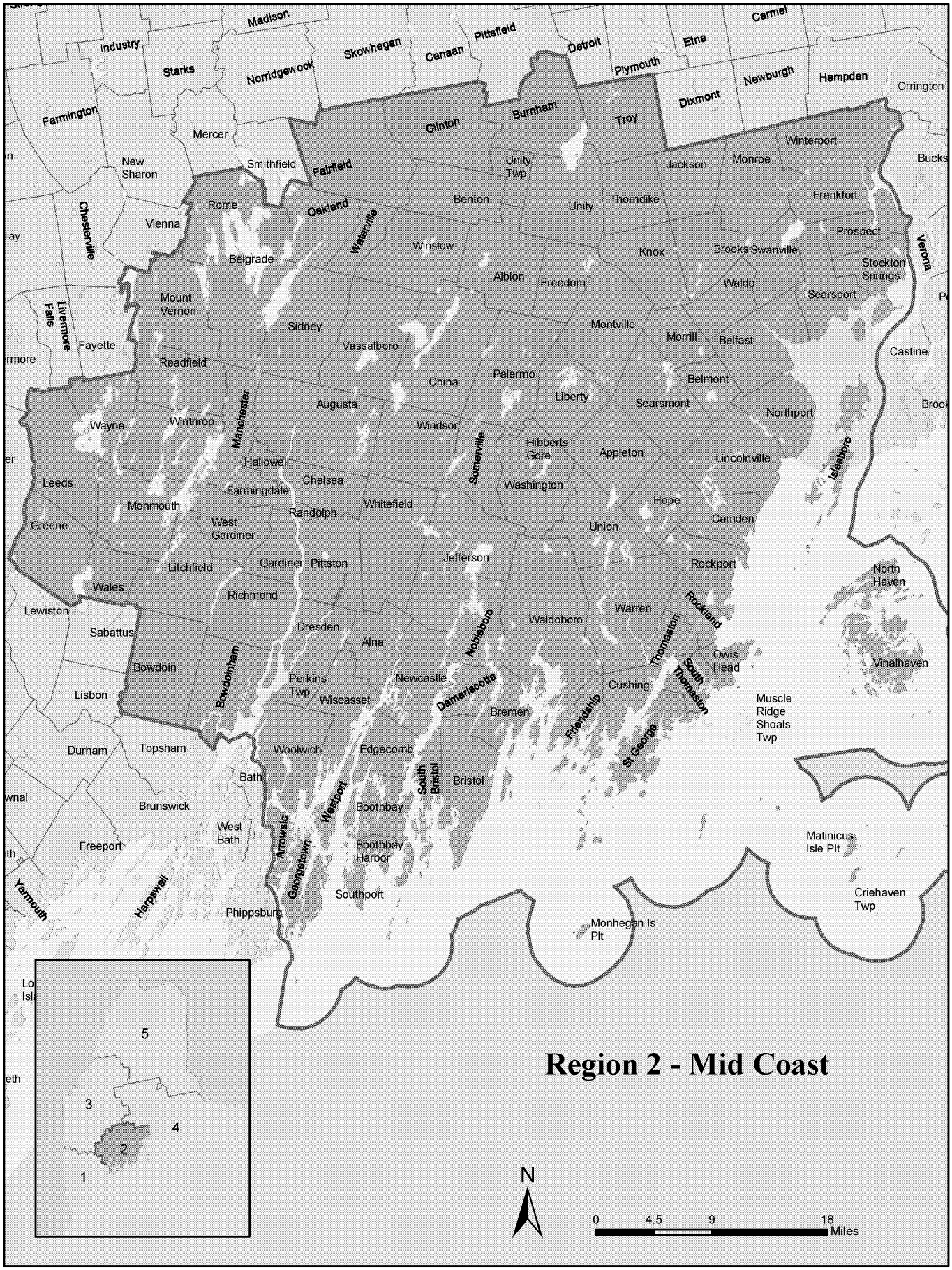
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Newburgh
Hampden
Orrington
Farmington
Mercer
Clinton
Burnham
Troy
Winterport
New Sharon
Smithfield
Fairfield
Unity Twp
Jackson
Monroe
Bucks
Rome
Oakland
Benton
Unity
Thorndike
Frankfort
Vienna
Chesterville
Waterville
Winslow
Prospect
Belgrade
Knox
Brooks
Swanville
Verona
Albion
Freedom
Waldo
Stockton Springs
Searsport
Mount Vernon
Livermore Falls
Sidney
Montville
Morrill
Belfast
Fayette
Vassalboro
Castine
Readfield
China
Palermo
Belmont
Augusta
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Hope
Camden
Greene
West Gardiner
Union
Litchfield
Gardiner
Pittston
Jefferson
Rockport
North Haven
Wales
Richmond
Rockland
Lewiston
Waldoboro
Warren
Sabattus
Dresden
Alna
Nobleboro
Thomaston
Owls Head
Bowdoin
Bowdoinham
Perkins Twp
Newcastle
South Thomaston
Vinalhaven
Lisbon
Wiscasset
Damariscotta
Cushing
Bremen
Friendship
Muscle Ridge Shoals Twp
Durham
Topsham
Woolwich
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St George
Bath
South Bristol
Bristol
Brunswick
Westport
Boothbay
West Bath
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Comstock Twp
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Lobster Twp
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Prentiss Twp
Bleka Gore
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Soldiertown Twp
W Middlesex Canal Grant
Big W Twp
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Gorham Gore
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Misery Gore Twp
Sandbar Tract Twp
Lily Bay Twp
Frenchtown Twp
Shawtown Twp
Sapling Twp
Misery Twp
Perlin Pond Twp
Bradstreet Twp
T5 R7 BKP WKR
Appleton Twp
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Jackman
Long Pond Twp
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Chase Stream Twp
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Upper Enchanted Twp
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Greenville
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Squaretown Twp
Moxie Gore
West Forks Pit
Lower Enchanted Twp
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Kibby Twp
Chain of Ponds Twp
Coburn Gore
Massachusetts Gore
Elliottsville Twp
T7 R9 NWP
Shirley
East Moxie Twp
The Forks Pit
Bowtown Twp
Pierce Pond Twp
T3 R4 BKP WKR
Flagstaff Twp
Jim Pond Twp
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Seven Ponds Twp
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Parmachenee Twp
Blanchard Twp
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Bowerbank
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Lynchtown Twp
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Mayfield Twp
Moscow
Pleasant Ridge Pit
Highland Pit
Wyman Twp
Parkman
Sangerville
Dexter
Wellington
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Caplin Pit
Lang Twp
Davis Twp
Lower Cupsuptic Twp
Parkertown Twp
Cambridge
Ripley
Corinna
Binghem
Concord Twp
Lexington Twp
Kingfield
Mount Abram Twp
Redington Twp
Dallas Pit
Rangeley
Adamstown Twp
Lincoln Pit
Harmony
Athens
Solon
Embden
New Portland
Salem Twp
Madrid
Sandy River Pit
Rangeley Pit
St Albans
Hartland
Comville
Freeman Twp
Phillips
Richardsontown Twp
Township E
Township D
Township C
Magalloway Pit
Palmyra
Newport
Pittsfield
Detroit
Plymouth
Skowhegan
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Starks
Industry
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Anson
New Vineyard
Strong
Avon
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Upton
C Surplus
Andover N Surplus
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Weld
Temple
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Sidney
Fayette
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Riley Twp
Newry
Hanover
Gilead
Woodstock
Livermore
Readfield
Sumner
Hartford
Batchelders Grant Twp
Mason Twp
Albany Twp
Greenwood
West Paris
Wayne
Winthrop
Manchester
Augusta
Hallowell
Chelsea
Farmingdale
Monmouth
Randolph
West Gardiner
Turner
Leeds
Greene
Stoneham
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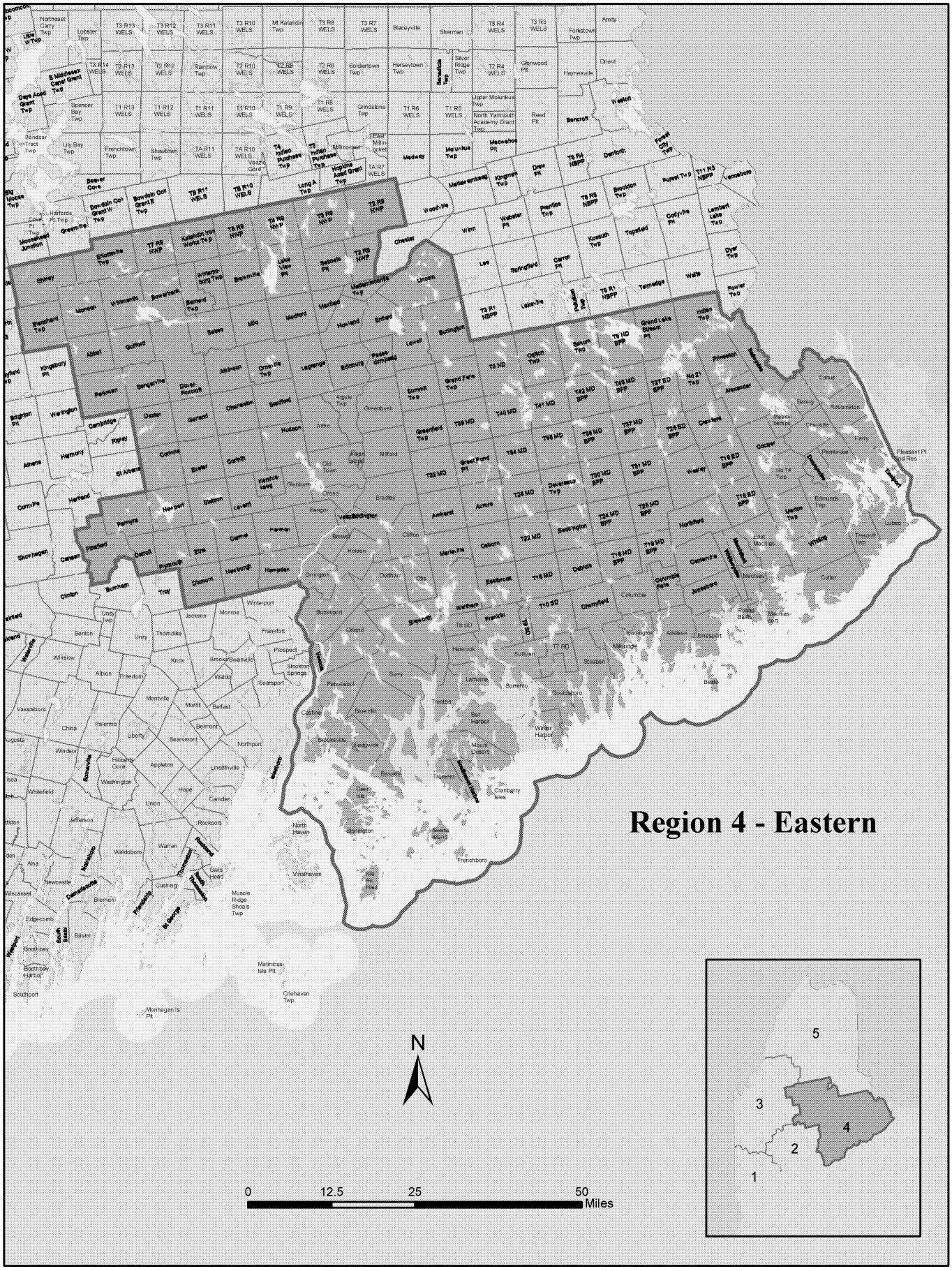
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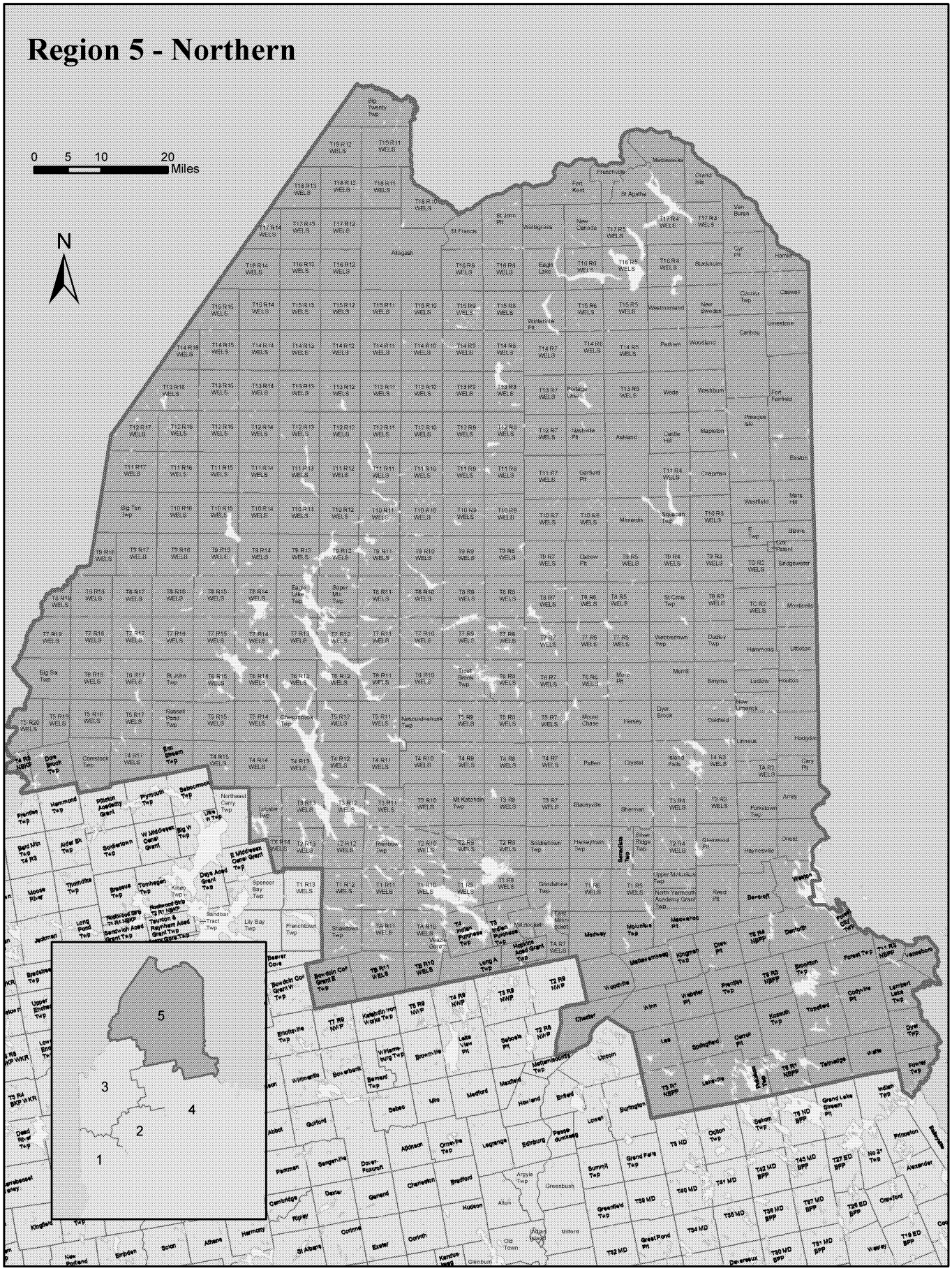
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General Decision Number: ME080003 07/25/2008 ME3

Superseded General Decision Number: ME20070003

State: Maine

Construction Type: Highway

Counties: Androscoggin and Cumberland Counties in Maine.

Highway Construction Projects Excluding Major Bridging (for example: bascule, suspension and spandrel arch bridges; those bridging waters presently navigating or to be navigable; and those involving marine construction in any degree); tunnels, building structures in rest area projects and railroad construction.

Modification Number	Publication Date
0	02/08/2008
1	07/25/2008

* SUME2000-011 10/24/2000

	Rates	Fringes
CARPENTER	$ 11.30	1.95
ELECTRICIAN	$ 17.90	2.30
Laborers:		
Flaggers	$ 6.55	
Landscape	$ 7.99	.72
Unskilled	$ 8.69	1.08
Power equipment operators:		
Backhoes	$ 12.39	2.00
Bulldozers	$ 11.13	1.94
Excavators	$ 11.24	1.31
Loaders	$ 11.19	1.82
Rollers	$ 10.16	1.56
Truck drivers:		
Dump	$ 9.02	1.39
Two axle	$ 9.08	1.28

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

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U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

General Decision Number: ME080009 07/25/2008 ME9

Superseded General Decision Number: ME20070009

State: Maine

Construction Type: Highway

Counties: Aroostook, Franklin, Hancock, Kennebec, Knox, Lincoln, Oxford, Piscataquis, Sagadahoc, Somerset, Waldo and York Counties in Maine.

HIGHWAY CONSTRUCTION PROJECTS excluding major bridging (for example: bascule, suspension and spandrel arch bridges; those bridging waters presently navigating or to be navigatable; and those involving marine construction in any degree); tunnels, building structures in rest area projects and railroad construction.

Modification Number	Publication Date
0	02/08/2008
1	06/06/2008
2	07/25/2008

ENGI0004-015 04/01/2008

	Rates	Fringes
Power equipment operators:		
Pavers	$ 18.22	8.50
Rollers	$ 18.22	8.50

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* SUME2000-008 10/24/2000

	Rates	Fringes
CARPENTER	$ 11.60	1.51
Ironworkers:		
Structural	$ 12.03	1.58
Laborers:		
Drillers	$ 10.00	2.50
Flaggers	$ 6.55	
Guardrail Installers	$ 7.92	
Landscape	$ 7.87	.16
Line Stripper	$ 8.69	.23
Pipelayers	$ 9.21	2.31
Rakers	$ 9.00	1.51
Sign Erectors	$ 10.00	
Unskilled	$ 8.66	1.38
Wheelman	$ 8.50	.43
Power equipment operators:		
Backhoes	$ 11.87	2.05
Bulldozers	$ 12.33	2.88
Cranes	$ 14.06	1.75
Excavators	$ 12.38	2.48
Graders	$ 13.06	3.73
Loaders	$ 11.41	2.87
Mechanics	$ 13.18	2.57
Truck drivers:		

Dump	$	9.35	3.10
Tri axle	$	8.70	1.18
Two axle	$	8.56	2.19

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

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payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

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END OF GENERAL DECISION

General Decision Number: ME080010 06/06/2008 ME10

Superseded General Decision Number: ME20070010

State: Maine

Construction Type: Highway

County: Penobscot County in Maine.

HIGHWAY CONSTRUCTION PROJECTS excluding major bridging (for example: bascule, suspension and spandrel arch bridges; those bridging waters presently navigating or to be navigable; and those involving marine construction in any degree); tunnels, building structures in rest area projects and railroad construction.

Modification Number	Publication Date
0	02/08/2008
1	06/06/2008

* ENGI0004-011 04/01/2008

	Rates	Fringes
Power equipment operators:		
Grader	$ 18.22	8.50
Paver	$ 18.22	8.50
Roller	$ 18.22	8.50

* SUME2000-009 10/24/2000

	Rates	Fringes
CARPENTER		
Including Form Work	$ 11.19	1.72
Cement Mason/Finisher	$ 9.13	
Ironworkers:		
Stuctural	$ 17.50	1.70
Laborers:		
Landscape	$ 7.84	
Rakers	$ 10.18	2.14
Unskilled	$ 8.73	1.71
Power equipment operators:		
Backhoes	$ 11.81	1.88
Bulldozers	$ 13.12	2.72
Cranes	$ 15.25	1.70
Excavators	$ 11.69	2.40
Loaders	$ 12.21	3.19
Truck drivers:		
Dump	$ 9.27	
Tri Axle	$ 10.63	2.11
Two Axle	$ 9.12	1.63

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

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* a Wage and Hour Division letter setting forth a position on a wage determination matter
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Washington, DC 20210

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END OF GENERAL DECISION

General Decision Number: ME080011 07/25/2008 ME11

Superseded General Decision Number: ME20070011

State: Maine

Construction Type: Highway

County: Washington County in Maine.

HIGHWAY CONSTRUCTION PROJECTS excluding major bridging (for example: bascule, suspension and spandrel arch bridges; those bridging waters presently navigatin or to be navigable; and those involving marine construction in any degree); tunnels, building structures in rest area projects and railroad construction

Modification Number	Publication Date
0	02/08/2008
1	07/25/2008

* SUME2000-010 10/24/2000

	Rates	Fringes
CARPENTER	$ 10.00	.76
Laborers:		
Flaggers	$ 6.55	
Unskilled	$ 8.75	
Power equipment operators:		
Backhoes	$ 12.17	
Bulldozers	$ 10.96	
Excavator	$ 10.50	
Loaders	$ 18.23	
Rollers	$ 18.23	
Truck drivers:		
Dump	$ 9.47	

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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WAGE DETERMINATION APPEALS PROCESS

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==========

END OF GENERAL DECISION

Special Provision
Section 103
Award and Contracting

103.1.1 Unit Prices Govern Add the following statement.

The award of these contracts shall be determined based on the total bid price as listed in the Geotechnical Explorations "Schedule of Prices" and the Contractor's Equipment List. Work under this contract shall be assigned through Task Order assignments on an as needed basis and determined and calculated on the individual unit prices given in the "Schedule of Prices" for each item listed on the individual Task Order assignments.

Work assigned under this contract shall follow the following order: The Contractor with the appropriate Equipment List and the lowest acceptable bid will have first option to accept the work assignment up to the maximum amount of their Contract Agreement Offer and Award. If for any reason this Contractor is unable to accept the work, the Contract Administrator may contact the 2nd low bidder with the appropriate Equipment List to do the work.

Additionally, if during execution of the Contract, the low bid Contractor fails to complete the work on time and in a satisfactory manner, the Department reserves the right to go directly to the second low bid Contractor for subsequent assignments. Should the second low bidder also exhibit a failure to maintain quality and schedule, the Department reserves the right to not order any work at all from any of the Contractors and re-bid the work.

Town: **Statewide Drilling**
Project: **2009-2011**
Date: **May 14, 2009**

SPECIAL PROVISIONS
SECTION 104
Utilities

MEETING

A Pre-construction Utility Conference, as defined in Subsection 104.4.6 of the Standard Specifications **is not** required.

GENERAL INFORMATION

These Special Provisions outline the arrangements that have been made by the Department for utility and/or railroad work to be undertaken in conjunction with these projects. Please notify known utilities or railroads having facilities presently located within the limits of these projects (**3**) weeks prior to any construction.

AERIAL

Summary:

The Contractor shall coordinate excavation, blasting and any other activities that may harm the existing Aerial facilities with utilities.

SAFE PRACTICES AROUND AERIAL UTILITY FACILITIES

The Contractor shall be responsible for complying with M.R.S.A. Title 35-A, Chapter 7-A Sections 751 - 761 Overhead High-Voltage Line Safety Act. Prior to commencing any work that may come within ten (10) feet of any aerial electrical line; the Contractor shall notify the aerial utilities as per Section 757 of the above act.

When the Contractor or others are involved in activities around any facilities, such as handling highway concrete safety barriers, doing temporary support of utility poles, requesting temporary safety covering of electrical power lines, excavating around underground utilities, etc., the Utilities request that they be notified at least five (5) working days in advance. The advance notice shall allow the utility the opportunity to be in attendance for the protection of their facility as well as promote worker safety

SUBSURFACE

Summary:
The Contractor shall coordinate excavation, blasting and any other activities that may harm the existing buried facilities with utilities.

BLASTING
In addition to any other notice that may be required, the Contractor shall notify an authorized representative of each utility having plant facilities close to the work site no later than ***FORTY-EIGHT*** hours before the blast. The notice shall state the approximate time of the blast.

DIG SAFE
The Contractor shall be responsible for determining the presence of underground utility facilities prior to commencing any excavation work and shall notify utilities of proposed excavation in accordance with M.R.S.A. Title 23 §3360-A, Maine "Dig Safe" System.

MAINTAINING UTILITY LOCATION MARKINGS
The Contractor will be responsible for maintaining the buried utility location markings following the initial locating by the appropriate utility or their designated representative.

THE CONTRACTOR SHALL PLAN AND CONDUCT HIS WORK ACCORDINGLY

SPECIAL PROVISION
SECTION 107
PROSECUTION AND PROGRESS
(Contract Time)

The specified contract completion date is July 31, 2011 for this Task Order Contract. Each individual Task Orders that are issued under this contract will have specific completion dates, to be determined on a project by project basis.

Special Provision
Section 631
Equipment Rental

Drill Rig for land will be paid for at an Hourly Rate. Payment is total reimbursement for all resources necessary to perform the item of work during the hours that the item is underway. Drill mud and other materials shall be incidental to the drill Rig Items. The Contractor and the Inspector shall keep records of the Contractor's time for performing the work.

Drill Rig for Water will be paid for at an Hourly Rate. Payment is total reimbursement for all resources necessary to perform the item of work during the hours that the item is underway, including the barge and transportation to and from. Drill mud and other materials shall be incidental to the drill Rig Items. The Contractor and the Inspector shall keep records of the Contractor's time for performing the work.

Drill Rig for Observation Wells will be paid for at an Hourly Rate. Payment is total reimbursement for all resources necessary to perform the item of work during the hours that the item is underway. Observation well materials, drill mud and other materials shall be incidental to the drill Rig Items. The Contractor and the Inspector shall keep records of the Contractor's time for performing the work.

Standby time shall be paid at the contracted hourly rate. The Contractor shall not be compensated for unauthorized standby time (e.g. breakdowns). The Inspector or Contract Administrator shall have sole authorization in deciding whether standby time shall be paid.

Pay Item	Description	Pay Unit
631.40	Drill Rig Land	Hour
631.401	Drill Rig Water	Hour
631.402	Drill Rig for Observation Wells	Hour
631.403	Standby Time	Hour

SPECIAL PROVISION
SECTION 656
Temporary Soil Erosion and Water Pollution Control

Standard Specifications, Section 656 is deleted and replaced by this Special Provision. The following information and requirements apply specifically to this Project.

1) If the Work includes the handling or storage of petroleum products or Hazardous Materials including the on site fueling of Equipment, the Resident must be provided with a Spill Prevention Control and Countermeasure Plan (SPCCP) plan for his/her approval. At a minimum, the SPCCP shall include:

   a) The name and emergency response numbers (telephone number, cellular phone and pager numbers, if applicable) of the Contractor's representative responsible for spill prevention;

   b) General description and location of (1) handling, transfer, storage, and containment facilities of such products or Materials ("activities and facilities") and (2) potential receptors of such products or Materials including oceans, lakes, ponds, rivers, streams, wetlands, and sand and gravel aquifers ("sensitive resources") including the distances between said activities and facilities and said sensitive resources;

   c) Description of preventative measures to be used to minimize the possibility of a spill including Equipment and/or Materials to be used to prevent discharges including absorbent Materials,

   d) A contingency response plan to be implemented if a spill should occur including a list of emergency phone/pager numbers including the Contractor's representative, MDEP Spill Response, the Resident, and local police and fire authorities. For a related provision, see *Standard Specification, Section 105.2.2 - Project Specific Emergency Planning*.

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

   a) All work shall be done in accordance with the latest revision of the Maine Department of Transportation Best Management Practices for Erosion and Sediment Control (a.k.a. Best Management Practices manual or BMP Manual) The "Table of Contents" of the latest version is dated "1/19/00" (available at http://www.state.me.us/mdot/mainhtml/bmp/bmpjan2000.pdf.)

   b) The on-site person responsible for implementation of this plan, shall be the Contractor's Superintendent or other supervisory employee (the "Environmental Coordinator") with the authority to immediately remedy any deficient controls and shall provide the Resident with their numbers (telephone number, cellular phone and pager numbers, if applicable) where the Environmental Coordinator can be reached 24 hours a day.

   c) All areas where soil is disturbed, including access road tracks, shall be permanently stabilized with mulch (hay, straw, erosion control blanket, stone, or erosion control mix)

SPECIAL PROVISION
SECTION 656
Temporary Soil Erosion and Water Pollution Control

on a daily basis. Where grass pre-existed, the area shall be seeded and mulched on a daily basis. All previously mulched areas shall be maintained and re-mulched on a daily basis if bare areas develop until an acceptable growth of grass has been obtained.

d) Drill cuttings shall be disposed of in accordance with all federal, state, and local laws and regulations.

e) When performing wash borings, drill cuttings shall be contained as necessary to prevent sediments from entering any drainage system or from washing into a protected water body or resource.

f) Drill hole shall be stabilized by the end of Work each day.

g) The Environmental Coordinator must inspect and maintain daily all erosion and sediment controls for the duration of the project.

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

i) If the Project Resident directs activity that involves soil disturbance beyond the boring activity or that involves In-stream Work, all permits shall be obtained by the DOT, the Standard Specification 656 shall be re-instituted, and a full SEWPCP will be required and paid for as Extra Work, prior to the start of the new activity.

Special Provision
Section 659
Mobilization

Mobilization of each boring rig on land, regardless of type, shall include preparation for the work, dismantling the equipment, Driller, helper, all equipment, supplies and materials required to perform the work.

Mobilization of each boring rig on water, regardless of type, shall include preparation for the work, dismantling the equipment, Driller, helper, all equipment, supplies, and materials required to perform the work. The rig(s), and all personnel, equipment, supplies and materials shall be transported to and from the landside staging area. The Contractor shall provide a barge, and a means for moving it from boring site to site and a crane for loading the rig and equipment onto and off of the barge. The barge shall be of sufficient size to safely carry the Contractor's drill rigs, crew, equipment, and Inspector. The barge shall also be set up in such a way as to be easily positioned on the required boring locations. The crane shall be of sufficient size to safely swing the equipment and/or barge into position on the water. The Contractor shall provide sanitary facilities for the crew and the Inspector. Payment for these items shall be incidental to Mobilization Water.

Pay Item	Description	Pay Unit
659.12	Mobilization Drill Rig Land	Each
659.121	Mobilization Drill Rig Water	Each

SUPPLEMENTAL SPECIFICATION

(Corrections, Additions, & Revisions to Standard Specifications - Revision of December 2002)

SECTION 101
CONTRACT INTERPRETATION

101.2 Definitions

Closeout Documentation Replace the sentence "A letter stating the amount….. DBE goals." with "DBE Goal Attainment Verification Form"

Add "Environmental Information Hazardous waste assessments, dredge material test results, boring logs, geophysical studies, and other records and reports of the environmental conditions. For a related provision, see Section 104.3.14 - Interpretation and Interpolation."

Add "Fabrication Engineer The Department's representative responsible for Quality Assurance of pre-fabricated products that are produced off-site."

Geotechnical Information Replace with the following: "Boring logs, soil reports, geotechnical design reports, ground penetrating radar evaluations, seismic refraction studies, and other records of subsurface conditions. For a related provision, see Section 104.3.14 - Interpretation and Interpolation."

SECTION 102
DELIVERY OF BIDS

102.7.1 Location and Time Add the following sentence "As a minimum, the Bidder will submit a Bid Package consisting of the Notice to Contractors, the completed Acknowledgement of Bid Amendments form, the completed Schedule of Items, 2 copies of the completed Agreement, Offer, & Award form, a Bid Bond or Bid Guarantee, and any other Certifications or Bid Requirements listed in the Bid Book."

102.11.1 Non-curable Bid Defects Replace E. with "E. The unit price and bid amount is not provided or a lump sum price is not provided or is illegible as determined by the Department."

SECTION 103
AWARD AND CONTRACTING

103.3.1 Notice and Information Gathering Change the first paragraph to read as follows: "After Bid Opening and as a condition for Award of a Contract, the Department may require an Apparent Successful Bidder to demonstrate to the Department's satisfaction that the Bidder is responsible and qualified to perform the Work."

SECTION 104
GENERAL RIGHTS AND RESPONSIBILITIES

104.3.14 Interpretation and Interpolation In the first sentence, change "…and Geotechnical Information." to "…Environmental Information, and Geotechnical Information."
Delete the entire Section 104.5.9 and replace with the following:

"104.5.9 Landscape Subcontractors The Contractor shall retain only Landscape Subcontractors that are certified by the Department's Environmental Office Landscape Unit."

SECTION 105
GENERAL SCOPE OF WORK

Delete the entire Section 105.6 and replace with the following:

105.6.1 Department Provided Services The Department will provide the Contractor with the description and coordinates of vertical and horizontal control points, set by the Department, within the Project Limits, for full construction Projects and other Projects where survey control is necessary. For Projects of 1,500 feet in length, or less: The Department will provide three points. For Projects between 1,500 and 5,000 feet in length: The Department will provide one set of two points at each end of the Project. For Projects in excess of 5,000 feet in length, the Department will provide one set of two points at each end of the Project, plus one additional set of two points for each mile of Project length. For non-full construction Projects and other Projects where survey control is not necessary, the Department will not set any control points and, therefore, will not provide description and coordinates of any control points. Upon request of the Contractor, the Department will provide the Department's survey data management software and Survey Manual to the Contractor, or its survey Subcontractor, for the exclusive use on the Department's Projects.

105.6.2 Contractor Provided Services Utilizing the survey information and points provided by the Department, described in Subsection 105.6.1, Department Provided Services, the Contractor shall provide all additional survey layout necessary to complete the Work. This may include, but not be limited to, reestablishing all points provided by the Department, establishing additional control points, running axis lines, providing layout and maintenance of all other lines, grades, or points, and survey quality control to ensure conformance with the Contract. The Contractor is also responsible for providing construction centerline, or close reference points, for all Utility Facilities relocations and adjustments as necessary to complete the Work. When the Work is to connect with existing Structures, the Contractor shall verify all dimensions before proceeding with the Work. The Contractor shall employ or retain competent engineering and/or surveying personnel to fulfill these responsibilities.

The Contractor must notify the Department of any errors or inconsistencies regarding the data and layout provided by the Department as provided by Section 104.3.3 - Duty to Notify Department If Ambiguities Discovered.

105.6.2.1 Survey Quality Control The Contractor is responsible for all construction survey quality control. Construction survey quality control is generally defined as, first, performing initial field survey layout of the Work and, second, performing an independent check of the initial layout using independent survey data to assure the accuracy of the initial layout; additional iterations of checks may be required if significant discrepancies are discovered in this process. Construction survey layout quality control also requires written documentation of the layout process such that the process can be followed and repeated, if necessary, by an independent survey crew.

105.6.3 Survey Quality Assurance It is the Department's prerogative to perform construction survey quality assurance. Construction survey quality assurance may, or may not, be performed by the Department. Construction survey quality assurance is generally defined as an independent check of the construction survey quality control. The construction survey quality assurance process may involve physically checking the Contractor's construction survey layout using independent survey data, or may simply involve reviewing the construction survey quality control written documentation. If the Department elects to physically check the Contractor's survey layout, the Contractor's designated surveyor may be required to be present. The Department will provide a minimum notice of 48 hours to the Contractor, whenever possible, if the Contractor's designated surveyor's presence is required. Any errors discovered through the quality assurance process shall be corrected by the Contractor, at no additional cost to the Department.

105.6.4 Boundary Markers The Contractor shall preserve and protect from damage all monuments or other points that mark the boundaries of the Right-of-Way or abutting parcels that are outside the area that must be disturbed to perform the Work. The Contractor indemnifies and holds harmless the Department from all claims to reestablish the former location of all such monuments or points including claims arising from 14 MRSA § 7554-A. For a related provision, see Section 104.3.11 - Responsibility for Property of Others.

SECTION 106
QUALITY

106.4.3 Testing Change the first sentence in paragraph three from "…maintain records of all inspections and tests." to "…maintain original documentation of all inspections, tests, and calculations used to generate reports."

106.6 Acceptance Add the following to paragraph 1 of A: "This includes Sections 401 - Hot Mix Asphalt, 402 - Pavement Smoothness, and 502 - Structural Concrete - Method A - Air Content."

Add the following to the beginning of paragraph 3 of A: "For pay factors based on Quality Level Analysis, and"

106.7.1 Standard Deviation Method Add the following to F: "Note: In cases where the mean of the values is equal to either the USL or the LSL, then the PWL will be 50 regardless of the computed value of s."

Add the following to H: "Method C Hot Mix Asphalt: PF = [55 + (Quality Level *0.5)] * 0.01"

SECTION 107
TIME

107.3.1 General Add the following: "If a Holiday occurs on a Sunday, the following Monday shall be considered a Holiday. Sunday or Holiday work must be approved by the Department, except that the Contractor may work on Martin Luther King Day, President's Day, Patriot's Day, the Friday after Thanksgiving, and Columbus Day without the Department's approval."

107.7.2 Schedule of Liquidated Damages Replace the table of Liquidated Damages as follows:

From More Than	Up to and Including	Amount of Liquidated Damages per Calendar Day
$0	$100,000	$100
$100,000	$300,000	$200
$300,000	$500,000	$400
$500,000	$1,000,000	$575
$1,000,000	$2,000,000	$750
$2,000,000	$4,000,000	$900
$4,000,000	and more	$1,875

SECTION 108
PAYMENT

108.4 Payment for Materials Obtained and Stored First paragraph, second sentence, delete the words "…Delivered on or near the Work site at acceptable storage places."

SECTION 109
CHANGES

109.1.1 Changes Permitted Add the following to the end of the paragraph: "There will be no adjustment to Contract Time due to an increase or decrease in quantities, compared to those estimated, except as addressed through Contract Modification(s)."

109.1.2 Substantial Changes to Major Items Add the following to the end of the paragraph: "Contract Time adjustments may be made for substantial changes to Major Items when the change affects the Critical Path, as determined by the Department"

109.4.4 Investigation / Adjustment Third sentence, delete the words "subsections (A) - (E)"

109.5.1 Definitions - Types of Delays

B. Compensable Delay Replace (1) with the following; "a weather related Uncontrollable Event of such an unusually severe nature that a Federal Emergency Disaster is declared. The Contractor will only be entitled to an Equitable Adjustment if the Project falls within the geographic boundaries prescribed under the disaster declaration."

109.7.2 Basis of Payment Replace with the following: "Equitable Adjustments will be established by mutual Agreement for compensable items listed in Section 109.7.3-Compensable Items, based upon Unit or Lump Sum Prices. If Agreement cannot be reached, the Contractor shall accept payment on a Force Account basis as provided in Section 109.7.5 - Force Account Work, as full and complete compensation for all Work relating to the Equitable Adjustment."

109.7.3 Compensable Items Replace with the following: "The Contractor is entitled to compensation for the following items, with respect to agreed upon Unit or Lump Sum Prices:

1. Labor expenses for non-salaried Workers and salaried foremen.

2. Costs for Materials.

3. A 15 % markup on the totals of Items 1 and 2 of this subsection 109.7.3 for home office overhead and profit of the Contractor, its Subcontractors and suppliers, and any lower tier Subcontractors or suppliers, with no mark-ups on mark-ups.

4. Cost for Equipment, based on Blue Book Rates or leased rates, as set forth in Section 109.7.5(C), or the Contractor's Actual Costs if determined by the Department to be lower.

5. Time.

6. Subcontractor quoted Work, as set forth below in Section 109.7.5 (F)."

109.7.5 Force Account Work

C. Equipment

Paragraph 2, delete sentence 1 which starts; "Equipment leased…."

Paragraph 6, change sentence 2 from "The Contractor may furnish…" to read "If requested by the Department, the Contractor will produce cost data to assist the Department in the establishment of such rental rate, including all records that are relevant to the Actual Costs including rental Receipts, acquisition costs, financing documents, lease Agreements, and maintenance and operational cost records."
Add the following paragraph; "Equipment leased by the Contractor for Force Account Work and actually used on the Project will be paid for at the actual invoice amount plus 10% markup for administrative costs."

Add the following section;

"F. Subcontractor Work When accomplishing Force Account Work that utilizes Subcontractors, the Contractor will be allowed a maximum markup of 5% for profit and overhead on the Subcontractor's portion of the Force Account Work."

SECTION 110
INDEMNIFICATION, BONDING, AND INSURANCE

Delete the entire Section 110.2.3 and replace with the following:

110.2.3 Bonding for Landscape Establishment Period The Contractor shall provide a signed, valid, and enforceable Performance, Warranty, or Maintenance Bond complying with the Contract, to the Department at Final Acceptance.

The bond shall be in the full amount for all Pay Items for work pursuant to Sec 621, Landscape, payable to the "Treasurer - State of Maine," and on the Department's forms, on exact copies thereof, or on forms that do not contain any significant variations from the Department's forms as solely determined by the Department.

The Contractor shall pay all premiums and take all other actions necessary to keep said bond in effect for the duration of the Landscape Establishment Period described in Special Provision 621.0036 - Establishment Period. If the Surety becomes financially insolvent, ceases to be licensed or approved to do business in the State of Maine, or stops operating in the United States, the Contractor shall file new bonds complying with this Section within 10 Days of the date the Contractor is notified or becomes aware of such change.

All Bonds shall be procured from a company organized and operating in the United States, licensed or approved to do business in the State of Maine by the State of Maine Department of Business Regulation, Bureau of Insurance, and listed on the latest Federal Department of the Treasury listing for "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies."

By issuing a bond, the Surety agrees to be bound by all terms of the Contract, including those related to payment, time for performance, quality, warranties, and the Department's self-help remedy provided in Section 112.1 - Default to the same extent as if all terms of the Contract are contained in the bond(s).

Regarding claims related to any obligations covered by the bond, the Surety shall provide, within 60 Days of Receipt of written notice thereof, full payment of the entire claim or written notice of all bases upon which it is denying or contesting payment. Failure of the Surety to provide such notice within the 60-day period constitutes the Surety's waiver of any right to deny or contest payment and the Surety's acknowledgment that the claim is valid and undisputed.

SECTION 202
REMOVING STRUCTURES AND OBSTRUCTIONS

202.02 Removing Buildings Make the following change to the last sentence in the final paragraph, change "…Code of Maine Regulations 401." to "…Department of Environmental Protection Maine Solid Waste Management Rules, 06-096 CMR Ch. 401, Landfill Siting, Design and Operation."

SECTION 203
EXCAVATION AND EMBANKMENT

203.01 Description Under b. Rock Excavation; add the following sentence: "The use of perchlorate is not allowed in blasting operations."

SECTION 502
STRUCTURAL CONCRETE

502.05 Composition and Proportioning; TABLE #1; NOTE #2; third sentence; Change "…alcohol based saline sealer…" to "alcohol based silane sealer…". Add NOTE #6 to Class S Concrete.

502.0502 Quality Assurance Method A - Rejection by Resident Change the first sentence to read: "For an individual sublot with test results failing to meet the criteria in Table #1, or if the calculated pay factor for Air Content is less than 0.80……"

502.0503 Quality Assurance Method B - Rejection by Resident Change the first sentence to read: "For material represented by a verification test with test results failing to meet the criteria in Table #1, the Department will……"

502.0505 Resolution of Disputed Acceptance Test Results Combine the second and third sentence to read: "Circumstances may arise, however, where the Department may ……"
502.10 Forms and False work

D. Removal of Forms and False work 1., First paragraph; first, second, and third sentence; replace "forms" with "forms and false work"

502.11 Placing Concrete

G. Concrete Wearing Surface and Structural Slabs on Precast Superstructures Last paragraph; third sentence; replace "The temperature of the concrete shall not exceed 24° C [75° F} at the time of placement." with "The temperature of the concrete shall not exceed 24° C [75° F} at the time the concrete is placed in its final position."

502.15 Curing Concrete First paragraph; replace the first sentence with the following; "All concrete surfaces shall be kept wet with clean, fresh water for a curing period of at least 7 days after concrete placing, with the exception of vertical surfaces as provided for in Section 502.10 (D) - Removal of Forms and False work."

Second paragraph; delete the first two sentences.

Third paragraph; delete the entire paragraph which starts "When the ambient temperature…."

Fourth paragraph; delete "approved" to now read "…continuously wet for the entire curing period…"

Fifth paragraph; second sentence; change "…as soon as it is possible to do so without damaging the concrete surface." to "…as soon as possible."

Seventh paragraph; first sentence; change "…until the end of the curing period." to "…until the end of the curing period, except as provided for in Section 502.10(D) - Removal of Forms and False work."

502.19 Basis of Payment First paragraph, second sentence; add "pier nose armor" to the list of items included in the contract price for concrete.

SECTION 503
REINFORCING STEEL

503.06 Placing and Fastening Change the second paragraph, first sentence from: "All tack welding shall be done in accordance with Section 504, Structural Steel." to "All tack welding shall be done in accordance with AWS D1.4 Structural Welding Code - Reinforcing Steel."

SECTION 504
STRUCTURAL STEEL

504.09 Facilities for Inspection Add the follow as the last paragraph: "Failure to comply with the above requirements will be consider to be a denial to allow access to work by the Contractor. The Department will reject any work done when access for inspection is denied."

504.18 Plates for Fabricated Members Change the second paragraph, first sentence from: "…ASTM A 898/A 898 M…" to "…ASTM A 898/A 898 M or ASTM A 435/A 435 M as applicable and…"

504.31 Shop Assembly Add the following as the last sentence: "The minimum assembly length shall include bearing centerlines of at least two substructure units."

504.64 Non Destructive Testing-Ancillary Bridge Products and Support Structures Change the third paragraph, first sentence from "One hundred percent…" to "Twenty five percent…"

SECTION 535
PRECAST, PRESTRESSED CONCRETE SUPERSTRUCTURE

535.02 Materials Change "Steel Strand for Concrete Reinforcement" to "Steel Strand." Add the following to the beginning of the third paragraph; "Concrete shall be Class P conforming to the requirements in this section. 28 day compressive strength shall be as stated on the plans. Coarse aggregate…."

535.05 Inspection Facilities Add the follow as the last paragraph: "If the above requirements are not met, the Contractor shall be considered to be in violation of Standard Specification 104.2.5 – Right to Inspect Work. All work occurring during a violation of this specification will be rejected."

535.26 Lateral Post-Tensioning Replace the first paragraph; "A final tension…" with "Overstressing strands for setting losses cannot be accomplished for chuck to chuck lengths of 7.6 m [25 ft] and less. In such instances, refer to the Plans for all materials and methods. Otherwise, post-tensioning shall be in accordance with PCI standards and shall provide the anchorage force noted in the Plans. The applied jacking force shall be no less than 100% of the design jacking force."

SECTION 603
PIPE CULVERTS AND STORM DRAINS

603.0311 Corrugated Polyethylene Pipe for Option III Replace the Minimum Mandrel Diameter Table with the following:

Nominal Size US Customary (in)	Minimum Mandrel Diameter (in)	Nominal Size Metric (mm)	Minimum Mandrel Diameter (mm)
12	11.23	300	280.73
15	14.04	375	350.91
18	16.84	450	421.09
24	22.46	600	561.45
30	28.07	750	701.81
36	33.69	900	842.18
42	39.30	1050	982.54
48	44.92	1200	1122.90

SECTION 604
MANHOLES, INLETS, AND CATCH BASINS

604.02 Materials Add the following:

"Tops and Traps	712.07
Corrugated Metal Units	712.08
Catch Basin and Manhole Steps	712.09"

SECTION 605
UNDERDRAINS

605.05 Underdrain Outlets Make the following change:

In the first paragraph, second sentence, delete the words "metal pipe".

SECTION 606
GUARDRAIL

606.02 Materials Delete the entire paragraph which reads "The sole patented supplier of multiple mailbox…." and replace with "Acceptable multiple mailbox assemblies shall be listed on the Department's Approved Products List and shall be NCHRP 350 tested and approved."
Delete the entire paragraph which reads "Retroreflective beam guardrail delineators…." and replace with "Reflectorized sheeting for Guardrail Delineators shall meet the requirements of Section 719.01 - Reflective Sheeting. Delineators shall be fabricated from high-impact, ultraviolet and weather resistant thermoplastic.

606.09 Basis of Payment First paragraph; delete the second and third sentence in their entirety and replace with "Butterfly-type guardrail reflectorized delineators shall be mounted on all W-beam guardrail at an interval of every 10 posts [62.5 ft] on tangents sections and every 5 posts [31.25 ft] on curved sections as directed by the Resident. On divided highways, the delineators shall be yellow on the left hand side and silver/white on the right hand side. On two-way

roadways, the delineators shall be silver/white on the right hand side. All delineators shall have retroreflective sheeting applied to only the traffic facing side. Reflectorized guardrail delineators will not be paid for directly, but will be considered incidental to the guardrail items."

SECTION 609
CURB

609.04 Bituminous Curb f., Delete the requirement "Color Natural (White)"

SECTION 615
LOAM

615.02 Materials Make the following change:

Organic Content	Percent by Volume
Humus	"5% - 10%", as determined by Ignition Test

SECTION 618
SEEDING

618.01 Description Change the first sentence to read as follows: "This work shall consist of furnishing and applying seed ….." Also remove ",and cellulose fiber mulch" from 618.01(a).
618.03 Rates of Application In 618.03(a), remove the last sentence and replace with the following: "These rates shall apply to Seeding Method 2, 3, and Crown Vetch."

In 618.03(c) "1.8 kg [4 lb]/unit." to "1.95 kg [4 lb]/unit."

618.09 Construction Method In 618.09(a) 1, sentence two, replace "100 mm [4 in]" with "25 mm [1 in] (Method 1 areas) and 50 mm [2 in] (Method 2 areas)"

618.15 Temporary Seeding Change the Pay Unit from Unit to Kg [lb].

SECTION 620
GEOTEXTILES

620.03 Placement Section (c)

Title: Replace "Non-woven" in title with "Erosion Control".
First Paragraph: Replace first word "Non-woven" with "Woven monofilament".
Second Paragraph: Replace second word "Non-woven" with "Erosion Control".

620.07 Shipment, Storage, Protection and Repair of Fabric Section (a)

Replace the second sentence with the following: "Damaged geotextiles, as identified by the Resident, shall be repaired immediately."

620.09 Basis of Payment

Pay Item 620.58: Replace "Non-woven" with "Erosion Control"
Pay Item 620.59: Replace "Non-woven" with "Erosion Control"

SECTION 621
LANDSCAPING

621.0036 Establishment Period In paragraph 4 and 5, change "time of Final Acceptance" to "end of the period of establishment". In Paragraph 7, change "Final Acceptance date" to ""end of the period of establishment" and change "date of Final Acceptance" to "end of the period of establishment".

SECTION 626
HIGHWAY SIGNING

626.034 Concrete Foundations Add to the following to the end of the second paragraph: "Pre-cast and cast-in-place foundations shall be warranteed against leaning and corrosion for two years after the project is completed. If the lean is greater than 2 degrees from normal or the foundation is spalling within the first two years, the Contractor shall replace the foundation at no extra cost."

SECTION 627
PAVEMENT MARKINGS

627.10 Basis of Payment Add to the following to the end of the third paragraph: "If allowed by Special Provision, the Contractor may utilize Temporary Bi-Directional Yellow and White(As required) Delineators as temporary pavement marking lines and paid for at the contract lump sum price. Such payment will include as many applications as required and removal."

SECTION 637
DUST CONTROL

637.06 Basis of Payment Add the following after the second sentence of the third paragraph: "Failure by the Contractor to follow Standard Specification or Special Provision - Section 637 and/or the Contractor's own Soil Erosion and Pollution Control Plan concerning Dust Control and/or the Contractor's own Traffic Control Plan concerning Dust Control and/or visible evidence of excessive dust problems, as determined by the Resident, will result in a reduction in payment, computed by reducing the Lump Sum Total by 5% per occurrence per day. The Department's Resident or any other representative of the Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item. Additional penalties may also be assessed in accordance with Special Provision 652 - Work Zone Traffic Control and Standard Specification 656 - Temporary Soil Erosion and Water Pollution Control."

SECTION 639
ENGINEERING FACILITIES

639.04 Field Offices Change the forth to last paragraph from: "The Contractor shall provide a fully functional desktop copier…" to "….desktop copier/scanner…"

Description Change "Floor Area" to "Floor Area (Outside Dimension)". Change Type B floor area from "15 (160)" to "20 (217)".

639.09 Telephone Paragraph 1 is amended as follows:
The contractor shall provide **two** telephone lines and two telephones,….

Add-

In addition the contractor will supply one computer broadband connection, modem lease and router. The router shall have wireless access and be 802.11n or 802.11g capable and wireless The type of connection supplied will be contingent upon the availability of services (i.e. DSL or Cable Broadband). It shall be the contractor's option to provide dynamic or static IP addresses through the service. **The selected service will have a minimum downstream connection of 1.5 Mbps and 384 Kbps upstream.** The contractor shall be responsible for the installation charges and all reinstallation charges following suspended periods. Monthly service and maintenance charges shall be billed by the Internet Service Provider (ISP) directly to the contractor.

SECTION 652
MAINTENANCE OF TRAFFIC

652.2.3 Flashing Arrow Board Delete the existing 5 paragraphs and replace with the following: Flashing Arrow Panels (FAP) must be of a type that has been submitted to AASHTO's National Transportation Product Evaluation Program (NTPEP) for evaluation and placed on the Maine Department of Transportations' Approved Products List of Portable Changeable Message Signs & Flashing Arrow Panels.

FAP units shall meet requirements of the current Manual on Uniform Traffic Control Devices (MUTCD) for Type "C" panels as described in Section 6F.56 - Temporary Traffic Control Devices. An FAP shall have matrix of a minimum of 15 low-glare, sealed beam, Par 46 elements capable of either flashing or sequential displays as well as the various operating modes as described in the MUTCD, Chapter 6-F. If an FAP consisting of a bulb matrix is used, each element should be recess-mounted or equipped with an upper hood of not less than 180 degrees. The color presented by the elements shall be yellow.

FAP elements shall be capable of at least a 50 percent dimming from full brilliance. Full brilliance should be used for daytime operation and the dimmed mode shall be used for nighttime operation. FAP shall be at least 2.4 M x 1.2 M [96" x 48"] and finished in non-reflective black. The FAP shall be interpretable for a distance not less than 1.6 km [1 mile].

Operating modes shall include, flashing arrow, sequential arrow, sequential chevron, flashing

double arrow, and flashing caution. In the three arrow signals, the second light from the arrow point shall not operate.

The minimum element on-time shall be 50 percent for the flashing mode, with equal intervals of 25 percent for each sequential phase. The flashing rate shall be not less than 25 nor more than 40 flashes per minute. All on-board circuitry shall be solid state.

Primary power source shall be 12 volt solar with a battery back-up to provide continuous operation when failure of the primary power source occurs, up to 30 days with fully charged batteries. Batteries must be capable of being charged from an onboard 110 volt AC power source and the unit shall be equipped with a cable for this purpose.

Controller and battery compartments shall be enclosed in lockable, weather-tight boxes.
The FAP shall be mounted on a pneumatic-tired trailer or other suitable support for hauling to various locations, as directed. The minimum mounting height of an arrow panel should be 2.1 M [7 feet] from the roadway to the bottom of the panel.

The face of the trailer shall be delineated on a permanent basis by affixing retro-reflective material, known as conspicuity material, in a continuous line as seen by oncoming drivers.

A portable changeable message sign may be used to simulate an arrow panel display."

652.2.4 Other Devices Delete the last paragraph and add the following:
"652.2.5 Portable Changeable Message Sign Trailer mounted Portable Changeable Message Signs (PCMS) must be of a type that has been submitted to AASHTO's National Transportation Product Evaluation Program (NTPEP) for evaluation and placed on the Maine Department of Transportations' Approved Products List of Portable Changeable Message Signs & Flashing Arrow Panels. The PCMS unit shall meet or exceed the current specifications of the Manual on Uniform Traffic Control Devices (MUTCD), 6F.55.

The front face of the sign should be covered with a low-glare protective material. The color of the LED elements shall be amber on a black background. The PCMS should be visible from a distance of 0.8 km [0.5 mile] day and night and have a minimum 15º viewing angle. Characters must be legible from a distance of at least 200 M [650 feet].

The message panel should have adjustable display rates (minimum of 3 seconds per phase), so that the entire message can be read at least twice at the posted speed, the off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed. Each message shall consist of either one or two phases. A phase shall consist of up to eight characters per line. The unit must be capable of displaying at least three lines of text with eight characters per line. Each character shall be 457 mm [18"] high. Each character module shall use at least a five wide and seven high pixel matrix. The text of the messages shall not scroll or travel horizontally or vertically across the face of the sign.

Units shall automatically adjust their brightness under varying light conditions to maintain legibility.

The control system shall include a display screen upon which messages can be reviewed before being displayed on the message sign. The control system shall be capable of maintaining memory when power is unavailable. Message must be changeable with either a notebook computer or an on-board keypad. The controller shall have the capability to store a minimum of 200 user-defined and 200 pre-programmed messages. Controller and battery compartments shall be enclosed in lockable, weather-tight boxes.

PCMS units shall have the capability of being made programmable by means of wireless communications. PCMS units shall also be fully capable of having an on-board radar system installed if required for a particular application.

PCMS' primary power source shall be solar with a battery back-up to provide continuous operation when failure of the primary power source occurs. Batteries must be capable of being charged from a 110 volt AC power source. The unit must also be capable of being operated solely from a 110 volt AC power source and be equipped with a cable for this purpose.

The PCMS shall be mounted on a trailer in such a way that the bottom of the message sign panel shall be a minimum of 2.1 M [7 ft] above the roadway in urban areas and 1.5 M [5 ft] above the roadway in rural areas when it is in the operating mode. PCMS trailers should be of a heavy duty type with a 51 mm [2"] ball hitch and a minimum of four leveling jacks (at each corner). The sign shall be capable of being rotated 360° relative to the trailer. The face of the trailer shall be delineated on a permanent basis by affixing retro-reflective material, known as conspicuity material, in a continuous line as seen by oncoming drivers."

652.3.3 Submittal of Traffic Control Plan In item e. change "A list of all certified flaggers…" to "A list of all the Contractor's certified flaggers…"

In the last paragraph add the following as the second sentence: "The Department will review and provide comments to the Contractor within 14 days of receipt of the TCP."

652.3.5 Installation of Traffic Control Devices In the first paragraph, first sentence; change "Signs shall be erected…" to "Portable signs shall be erected.." In the third sentence; change "Signs must be erected so that the sign face…" to "Post-mounted signs must also be erected so that the sign face…"

652.4 Flaggers Replace the first paragraph with the following; "The Contractor shall furnish flaggers as required by the TCP or as otherwise specified by the Resident. All flaggers must have successfully completed a flagger test approved by the Department and administered by a Department-approved Flagger-Certifier who is employing that flagger. All flaggers must carry an official certification card with them while flagging that has been issued by their employer. Flaggers shall wear safety apparel meeting ANSI 107-1999 Class 2 risk exposure and clearly identify the wearer as a person, shall be visible at a minimum distance of 300 m [1000 ft], and shall wear a hardhat with retroreflectivity. For nighttime conditions, Class 3 apparel should be considered, retroreflective or flashing SLOW/STOP paddles shall be used, and except in emergency situations the flagger station shall be illuminated to assure visibility."

Second paragraph, first sentence; change "…have sufficient distance to stop before entering the workspace." to "…have sufficient distance to stop at the intended stopping point." Third

sentence; change "At a spot obstruction…" to "At a spot obstruction with adequate sight distance,…"

Fourth paragraph, delete and replace with "Flaggers shall be provided as a minimum, a 10 minute break, every 2 hours and a 30 minute or longer lunch period away from the work station. Flaggers may only receive 1 unpaid break per day; all other breaks must be paid. Sufficient certified flaggers shall be available onsite to provide for continuous flagging operations during break periods. Breaker flaggers will not be paid for separately, but shall be considered incidental to the appropriate pay item."

652.8.2 Other Items Replace the last paragraph with the following: "There will be no payment made under any 652 pay items after the expiration of the adjusted total contract time."

SECTION 653
POLYSTYRENE PLASTIC INSULATION

653.05 Placing Backfill In the second sentence; change "…shall be not less than 150 mm [6 in] loose measure." to "…shall be not less than 250 mm [10 in] loose measure." In the third sentence; change "…crawler type bulldozer of not more than 390 kg/m^2 [80 lb/ft^2] ground contact pressure…" to "…crawler type bulldozer of not more than 4875 kg/m^2 [2000 lb/ft^2] ground contact pressure…"

653.06 Compaction In the last sentence; change "…not more than 390 kg/m^2 [80 lb/ft^2] ground contact…" to "…not more than 4875 kg/m^2 [2000 lb/ft^2] ground contact…"

SECTION 656
TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL

656.5.1 If Pay Item 656.75 Provided Replace the second paragraph with the following: "Failure by the Contractor to follow Standard Specification or Special Provision - Section 656 and/or the Contractor's own Soil Erosion and Pollution Control Plan will result in a reduction in payment, computed by reducing the Lump Sum Total by 5% per occurrence per day. The Department's Resident or any other representative of the Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item."

SECTION 701
STRUCTURAL CONCRETE RELATED MATERIALS

701.10 Fly Ash - Chemical Requirements Change all references from "ASTM C311" to "ASTM C114".

SECTION 703
AGGREGATES

703.05 Aggregate for Sand Leveling Change the percent passing the 9.5 mm [3/8 in] sieve from "85 – 10" to "85 – 100"

703.06 Aggregate for Base and Subbase Delete the first paragraph: "The material shall have…" and replace with "The material shall have a minimum degradation value of 15 as determined by Washington State DOT Test Method T113, Method of Test for Determination of Degradation Value (March 2002 version), except that the reported degradation value will be the result of testing a single specimen from that portion of a sample that passes the 12.5 mm [½ in] sieve and is retained on the 2.00 mm [No. 10] sieve, minus any reclaimed asphalt pavement used."

703.07 Aggregates for HMA Pavements Delete the forth paragraph: "The composite blend shall have…" and replace with "The composite blend, minus any reclaimed asphalt pavement used, shall have a Micro-Deval value of 18.0 or less as determined by AASHTO T 327. In the event the material exceeds the Micro Deval limit, a Washington Degradation test shall be performed. The material shall be acceptable if it has a value of 30 or more as determined by Washington State DOT Test Method T 113, Method of Test for Determination of Degradation Value (March 2002 version) except that the reported degradation value will be the result of testing a single composite specimen from that portion of the sample that passes the 12.5mm [1/2 inch] sieve and is retained on the 2.00mm [No 10] sieve, minus any reclaimed asphalt pavement used."

703.09 HMA Mixture Composition The coarse and fine aggregate shall meet the requirements of Section 703.07. The several aggregate fractions for mixtures shall be sized, graded, and combined in such proportions that the resulting composite blends will meet the grading requirements of the following table.

AGGREGATE GRADATION CONTROL POINTS

SIEVE SIZE	Nominal Maximum Aggregate Size---Control Points (Percent Passing)				
	TYPE 25 mm	TYPE 19 mm	TYPE 12.5 mm	TYPE 9.5 mm	TYPE 4.75 mm
	PERCENT BY WEIGHT PASSING - COMBINED AGGREGATE				
37.5 mm	100				
25 mm	90-100	100			
19 mm	-90	90-100	100		
12.5 mm		-90	90-100	100	100
9.5 mm		-	-90	90-100	95-100
4.75 mm		-	-	-90	80-100
2.36 mm	19-45	23-49	28-58	32-67	40 - 80
1.18 mm		-	-	-	-
600 µm		-	-	-	-
300 µm		-	-	-	-
75 µm	1-7	2-8	2-10	2-10	2-10

Gradation Classification---- The combined aggregate gradation shall be classified as coarse-graded when it passes below the Primary Control Sieve (PCS) control point as defined in the following table. All other gradations shall be classified as fine-graded.

GRADATION CLASSIFICATION

PCS Control Point for Mixture Nominal Maximum Aggregate Size (% passing)				
Nominal Maximum Aggregate Size	TYPE 25 mm	TYPE 19 mm	TYPE 12.5 mm	TYPE 9.5 mm
Primary Control Sieve	4.75 mm	4.75 mm	2.36 mm	2.36 mm
PCS Control Point (% passing)	40	47	39	47

If a Grading "D" mixture is allowed per Special Provision Section 403, it shall meet the following gradation and the aggregate requirements of Section 703.07.

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves
½ inch	100
⅜ inch	93-100
No. 4	60-80
No. 8	46-65
No. 16	25-55
No. 30	16-40
No. 50	10-30
No. 100	6-22
No. 200	3.0-8.0

703.18 Common Borrow Replace the first paragraph with the following: "Common borrow shall consist of earth, suitable for embankment construction. It shall be free from frozen material, perishable rubbish, peat, and other unsuitable material including material currently or previously contaminated by chemical, radiological, or biological agents unless the material is from a DOT project and authorized by DEP for use."

703.22 Underdrain Backfill Material Change the first paragraph from "…for Underdrain Type B…" to "…for Underdrain Type B and C…"

SECTION 706
NON-METALLIC PIPE

706.06 Corrugated Polyethylene Pipe for Underdrain, Option I and Option III Culvert Pipe Change the first sentence from "…300 mm diameters to 900 mm" to "…300 mm diameters to 1200 mm" Delete, in it's entirety, the last sentence which begins "This pipe and resins…" and replace with the following; "The manufacturing plants of polyethylene pipe shall be certified by the Eastern States Consortium. Polyethylene pipe shall be accepted based on third party certification by the AASHTO's National Transportation Product Evaluation Program."

SECTION 709
REINFORCING STEEL AND WELDED STEEL WIRE FABIC

709.03 Steel Strand Change the second paragraph from "…shall be 12mm [½ inch] AASHTO M203M/M203 (ASTM A416/A416M)…" to "…shall be 15.24 mm [0.600 inch] diameter AASHTO M203 (ASTM A416)…"

SECTION 710
FENCE AND GUARDRAIL

710.03 Chain Link Fabric Add the following sentence: "Chain Link fabric for PVC coated shall conform to the requirements of AASHTO M181, Type IV-Class B."

710.04 Metal Beam Rail Replace with the following: "Galvanized steel rail elements shall conform to the requirements of AASHTO M 180, Class A, Type II.

When corrosion resistant steel is specified, rail shall conform to AASHTO M 180, Class A, Type IV. Beams of corrosion resistant steel shall not be painted or galvanized. They shall be so handled and stored that the traffic face of these beams, used in a continuous run of guardrail, shall not show a distinctive color differential.

When metal beam rail is to be installed on a curve having a radius of curvature of 150 ft. or less, the beam sections shall be fabricated on an arc to the required radius and permanently stamped or embossed with the designated radius.

The engineer may take one piece of guardrail, a backup plate, and end or buffer section from each 200 pieces in a lot, or from each lot if less than 200 pieces are included therein for determination of compliance with specification requirements. If one piece fails to conform to the requirements of this specification, two other pieces shall be tested. If either of these pieces fails to conform to the requirements of this specification, the lot of material represented by these samples shall be rejected. A lot shall be considered that quantity of material offered for inspection at one time that bears the same heat and coating identification."

710.07 Guardrail Posts Section b. change "…AASHTO M183/M183M…" to "…AASHTO M 270M/M 270 Grade 250 (36)…"

SECTION 712
MISCELLANEOUS HIGHWAY MATERIALS

712.06 Precast Concrete Units In the first paragraph, change "…ASTM C478M…" to "…AASHTO M199…" Delete the second paragraph and replace with the following; "Approved structural fibers may be used as a replacement of 6 x 6 #10 gauge welded wire fabric when used at an approved dosage rate for the construction of manhole and catch basin units. The material used shall be one of the products listed on the Maine Department of Transportation's Approved Product List of Structural Fiber Reinforcement." Delete the fifth paragraph and replace with the following; "The concrete mix design shall be approved by the Department. Concrete shall contain 6% air content, plus or minus 1½% tolerance when tested according to AASHTO T152. All concrete shall develop a minimum compressive strength of

28 MPa [4000 psi] in 28 days when tested according to AASHTO T22. The absorption of a specimen, when tested according to AASHTO T280, Test Method "A", shall not exceed nine percent of the dry mass."

Add the following:
"712.07 Tops, and Traps These metal units shall conform to the plan dimensions and to the following specification requirements for the designated materials.

Gray iron or ductile iron castings shall conform to the requirements of AASHTO M306 unless otherwise designated."

712.08 Corrugated Metal Units The units shall conform to plan dimensions and the metal to AASHTO M36/M36M. Bituminous coating, when specified, shall conform to AASHTO M190 Type A.

712.09 Catch Basin and Manhole Steps Steps for catch basins and for manholes shall conform to ASTM C478M [ASTM C478], Section 13 for either of the following material:

(a) Aluminum steps-ASTM B221M, [ASTM B211] Alloy 6061-T6 or 6005-T5.

(b) Reinforced plastic steps Steel reinforcing bar with injection molded plastic coating copolymer polypropylene. Polypropylene shall conform to ASTM D 4101.

712.23 Flashing Lights Flashing Lights shall be power operated or battery operated as specified.

(a) Power operated flashing lights shall consist of housing, adapters, lamps, sockets, reflectors, lens, hoods and other necessary equipment designed to give clearly visible signal indications within an angle of at least 45 degrees and from 3 to 90 m [10 to 300 ft] under all light and atmospheric conditions.

Two circuit flasher controllers with a two-circuit filter capable of providing alternate flashing operations at the rate of not less than 50 nor more than 60 flashes per minute shall be provided.

The lamps shall be 650 lumens, 120 volt traffic signal lamps with sockets constructed to properly focus and hold the lamp firmly in position.
The housing shall have a rotatable sun visor not less than 175 mm [7 in] in length designed to shield the lens.

Reflectors shall be of such design that light from a properly focused lamp will reflect the light rays parallel. Reflectors shall have a maximum diameter at the point of contact with the lens of approximately 200 mm [8 in].

The lens shall consist of a round one-piece convex amber material which, when mounted, shall have a visible diameter of approximately 200 mm [8 in]. They shall distribute light and not diffuse it. The distribution of the light shall be asymmetrical in a downward direction. The light distribution of the lens shall not be uniform, but shall consist of a small high intensity portion with narrow distribution for long distance throw and a larger

low intensity portion with wide distribution for short distance throw. Lenses shall be marked to indicate the top and bottom of the lens.

(b) Battery operated flashing lights shall be self- illuminated by an electric lamp behind the lens. These lights shall also be externally illuminated by reflex-reflective elements built into the lens to enable it to be seen by reflex-reflection of the light from the headlights of oncoming traffic. The batteries must be entirely enclosed in a case. A locking device must secure the case. The light shall have a flash rate of not less than 50 nor more than 60 flashes per minute from minus 30 °C [minus 20 °F] to plus 65 °C [plus 150 °F]. The light shall have an on time of not less than 10 percent of the flash cycle. The light beam projected upon a surface perpendicular to the axis of the light beam shall produce a lighted rectangular projection whose minimum horizontal dimension shall be 5 degrees each side of the horizontal axis. The effective intensity shall not have an initial value greater than 15.0 candelas or drop below 4.0 candelas during the first 336 hours of continuous flashing. The illuminated lens shall appear to be uniformly bright over its entire illuminated surface when viewed from any point within an angle of 9 degrees each side of the vertical axis and 5 degrees each side of the horizontal axis. The lens shall not be less than 175 mm [7 in] in diameter including a reflex-reflector ring of 13 mm [½ in] minimum width around the periphery. The lens shall be yellow in color and have a minimum relative luminous transmittance of 0.440 with a luminance of 2854° Kelvin. The lens shall be one-piece construction. The lens material shall be plastic and meet the luminous transmission requirements of this specification. The case containing the batteries and circuitry shall be constructed of a material capable of withstanding abuse equal to or greater than 1.21 mm thick steel [No. 18 U.S. Standard Gage Steel]. The housing and the lens frame, if of metal shall be properly cleaned, degreased and pretreated to promote adhesion. It shall be given one or more coats of enamel which, when dry shall completely obscure the metal. The enamel coating shall be of such quality that when the coated case is struck a light blow with a sharp tool, the paint will not chip or crack and if scratched with a knife will not powder. The case shall be so constructed and closed as to exclude moisture that would affect the proper operation of light. The case shall have a weep hole to allow the escape of moisture from condensation. Photoelectric controls, if provided, shall keep the light operating whenever the ambient light falls below 215 lx [20 foot candles]. Each light shall be plainly marked as to the manufacturer's name and model number.

If required by the Resident, certification as to conformance to these specifications shall be furnished based on results of tests made by an independent testing laboratory. All lights are subject to random inspection and testing. All necessary random samples shall be provided to the Resident upon request without cost to the Department. All such samples shall be returned to the Contractor upon completion of the tests.

712.32 Copper Tubing Copper tubing and fittings shall conform to the requirements of ASTM B88M Type A [ASTM B88, Type K] or better.

712.33 Non-metallic Pipe, Flexible Non-metallic pipe and pipe fittings shall be acceptable flexible pipe manufactured from virgin polyethylene polymer suitable for transmitting liquids intended for human or animal consumption.

712.34 Non-metallic Pipe, Rigid Non-metallic pipe shall be Schedule 40 polyvinylchloride (PVC) that meets the requirement of ASTM D1785. Fittings shall be of the same material.

712.341 Metallic Pipe Metallic pipe shall be ANSI, Standard B36.10, Schedule 40 steel pipe conforming to the requirements of ASTM A53 Types E or S, Grade B. End plates shall be steel conforming to ASTM A36/A36M.

Both the sleeve and end plates shall be hot dip galvanized. Pipe sleeve splices shall be welded splices with full penetration weld before galvanizing.

712.35 Epoxy Resin Epoxy resin for grouting or sealing shall consist of a mineral filled thixotropic, flexible epoxy resin having a pot life of approximately one hour at 10°C [50°F]. The grout shall be an approved product suitable for cementing steel dowels into the preformed holes of curb inlets and adjacent curbing. The sealant shall be an approved product, light gray in color and suitable for coating the surface.

712.36 Bituminous Curb The asphalt cement for bituminous curb shall be of the grade required for the wearing course, or shall be Viscosity Grade AC-20 meeting the current requirements of Subsection 702.01 Asphalt Cement. The aggregate shall conform to the requirements of Subsection 703.07. The coarse aggregate portion retained on the 2.36 mm [No. 8] sieve may be either crushed rock or crushed gravel.

The mineral constituents of the bituminous mixture shall be sized and graded and combined in a composite blend that will produce a stable durable curbing with an acceptable texture.

Bituminous material for curb shall meet the requirements of Section 403 - Hot Bituminous Pavement.

712.37 Precast Concrete Slab Portland cement concrete for precast slabs shall meet the requirements of Section 502 - Structural Concrete, Class A.

The slabs shall be precast to the dimension shown on the plans and cross section and in accordance with the Standard Detail plans for Concrete Sidewalk Slab. The surface shall be finished with a float finish in accordance with Subsection 502.14(c). Lift devices of sufficient strength to hold the slab while suspended from cables shall be cast into the top or back of the slab.

712.38 Stone Slab Stone slabs shall be of granite from an acceptable source, hard, durable, predominantly gray in color, free from seams which impair the structural integrity and be of smooth splitting character. Natural color variations characteristic of the deposit will be permitted. Exposed surfaces shall be free from drill holes or indications of drill holes. The granite slabs in any one section of backslope must be all the same finish.

The granite slabs shall be scabble dressed or sawed to an approximately true plane having no projections or depressions over 13 mm [½ in] under a 600 mm [2 ft] straightedge or over 25 mm [1 in] under a 1200 mm [4 ft] straightedge. The arris at the intersection of the top surface and exposed front face shall be pitched so that the arris line is uniform throughout the length of the installed slabs. The sides shall be square to the exposed face unless the slabs are to be set

on a radius or other special condition which requires that the joints be cut to fit, but in any case shall be so finished that when the stones are placed side by side no space more than 20 mm [3/4 in] shall show in the joint for the full exposed height.

Liftpin holes in all sides will be allowed except on the exposed face.

SECTION 717
ROADSIDE IMPROVEMENT MATERIAL

717.03 C. Method #3 - Roadside Mixture #3 Change the seed proportions to the following:

Crown Vetch	25%
Perennial Lupine	25%
Red Clover	12.5%
Annual Rye	37.5%

717.05 Mulch Binder Change the third sentence to read as follows:

"Paper fiber mulch may be used as a binder at the rate of 2.3 kg/unit [5 lb/unit]."

SECTION 720
STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS

720.08 U-Channel Posts Change the first sentence from "…, U-Channel posts…" to "…, Rib Back U-Channel posts…"

SECTION 722
GEOTEXTILES

722.01 Stabilization/Reinforcement Geotextile Add the following to note #3; "The strengths specified in the columns labeled"<50%" and "≥ 50%" refer to the elongation at which the geotextile material was tested. For example; if a fabric is tested at 15% elongation then it must meet or exceed the minimum strength shown in the "<50%" column. Submittals must include the percent elongation at which the material was tested."

722.02 Drainage Geotextile Add the following to note #3; "The strengths specified in the columns labeled"<50%" and "≥ 50%" refer to the elongation at which the geotextile material was tested. For example; if a fabric is tested at 15% elongation then it must meet or exceed the minimum strength shown in the "<50%" column. Submittals must include the percent elongation at which the material was tested."

722.01 Erosion Control Geotextile Add the following note to Elongation in the Mechanical Property Table; "The strengths specified in the columns labeled"<50%" and "≥ 50%" refer to the elongation at which the geotextile material was tested. For example; if a fabric is tested at 15% elongation then it must meet or exceed the minimum strength shown in the "<50%" column. Submittals must include the percent elongation at which the material was tested."