

**Updated 10/15/15**

# **FEDERAL PROJECT**

## 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, (if required), 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™ web-based service, b) an electronic Bid Guaranty (if required) or a faxed copy of a Bid Bond (with original to be delivered within 72 hours), and c) any other Certifications or Bid requirements listed in the Bid Documents as due by Bid opening.
3. Include prices for all items in the Schedule of Items (excluding non-selected alternates).
4. Bid Guaranty acceptable forms are:
  - a) a properly completed and signed Bid Bond on the Department's prescribed form (or on a form that does not contain any significant variations from the Department's form as determined by the Department) for 5% of the Bid Amount or
  - b) an Official Bank Check, Cashier's Check, Certified Check, U.S. Postal Money Order or Negotiable Certificate of Deposit in the amount stated in the Notice to Contractors or
  - c) an electronic bid bond submitted with an electronic bid.
5. If a paper Bid is to be sent, "FedEx First Overnight" delivery is suggested as the package is delivered directly to the DOT Headquarters Building located at 16 Child Street in Augusta. Other means, such as U.S. Postal Service's Express Mail has proven not to be reliable.

### IN ADDITION, FOR FEDERAL AID PROJECTS:

6. Complete the DBE Proposed Utilization form, and submit with your bid. If you are submitting your bid electronically, you must FAX the form to (207) 624-3431. This is a curable defect.

*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, November 2014 Edition.*

# NOTICE

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

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

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

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 Robert Skehan at [robert.skehan@maine.gov](mailto:robert.skehan@maine.gov) , Rebecca Snowden at [rebecca.snowden@maine.gov](mailto:rebecca.snowden@maine.gov) or Diane Barnes at [diane.barnes@maine.gov](mailto:diane.barnes@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 information:

Bid Enclosed: Do Not Open

PIN:

Town:

Name of Contractor:

October 16, 2001

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

**KNOW ALL MEN BY THESE PRESENTS THAT** \_\_\_\_\_

\_\_\_\_\_, of the City/Town of \_\_\_\_\_ and State of \_\_\_\_\_

as Principal, and \_\_\_\_\_ as Surety, a

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

Business in \_\_\_\_\_ and hereby held and firmly bound unto the Treasurer of

the State of Maine in the sum of \_\_\_\_\_ for payment which Principal and Surety bind

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

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

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

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

\_\_\_\_\_ and if the Department shall accept said bid

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

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

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

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

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

force, and effect.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_

WITNESS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

WITNESS

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

PRINCIPAL:

By \_\_\_\_\_

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

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

SURETY:

By \_\_\_\_\_

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

Name of Local Agency: \_\_\_\_\_

# NOTICE

Bidders:

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

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

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



# NOTICE

## Disadvantaged Business Enterprise Proposed Utilization

The Apparent Low Bidder shall submit the Disadvantaged Business Enterprise Proposed Utilization form with their bid. This is a curable bid defect.

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 should 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.

MDOT's DBE Directory of Certified firms can also be obtained at <http://www.maine.gov/mdot/civilrights/dbe.htm>

## INSTRUCTIONS FOR PREPARING THE MaineDOT CONTRACTOR'S DBE/SUBCONTRACTOR UTILIZATION FORM

The Contractor Shall Extend equal opportunity to MaineDOT certified DBE firms (as listed in MaineDOT'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, fax number and e-mail address.

Calculate and provide percentage of your bid that will be allocated to DBE firms, Federal Project Identification Number, and location of the Project work.

In the columns, name each subcontractor, DBE and non-DBE firm to be used, provide the Unit/Item cost of the work/product to be provided by the subcontractor, give a brief description and the dollar value of the work.

Revised 1/12

**FHWA DBE GOAL NOTICE FFY 2016-18**  
**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 highway and bridge construction program; MaineDOT contracts covered by the program include consulting, construction, supplies, manufacturing, and service contracts.

For FFY 2016-18 (October 1, 2015 through September 30, 2018) MaineDOT has established an annual DBE participation goal of **2.0%** to be achieved through race/gender neutral means. This goal has been approved by the Federal Highway Administration and remains in effect through September 30, 2018. Maine DOT must meet this goal each federal fiscal year. If the goal is not met, MaineDOT must provide a justification for not meeting the goal and provide a plan to ensure the goal is met, which may include contract goals on certain projects that contractors will be required to meet.

MaineDOT asks all contractors, consultants and subcontractors to seek certified DBE firms for projects and to work to meet the determined 2.0% goal without the need to impose contract goals. DBE firms are listed on the MaineDOT website at:

<http://www.maine.gov/mdot/civilrights/dbe/>

Interested parties may view MaineDOT's DBE goal setting methodology also posted on this website. If you have questions regarding this goal or the DBE program you may contact Sherry Tompkins at the Maine Department of Transportation, Civil Rights Office by telephone at (207) 624-3066 or by e-mail at: [sherry.tompkins@maine.gov](mailto:sherry.tompkins@maine.gov)

**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 DATE:** \_\_\_\_\_

**FEDERAL PROJECT PIN #** \_\_\_\_\_ **PROJECT LOCATION:** \_\_\_\_\_

**TOTAL ANTICIPATED DBE \_\_\_\_ % PARTICIPATION FOR THIS CONTRACT**

<b>W B E</b>	<b>D B E</b>	<b>Non DBE</b>	<b>Firm Name</b>	<b>Item Number &amp; Description of Work</b>	<b>Quantity</b>	<b>Cost Per Unit/Item</b>	<b>Anticipated \$ Value</b>
<b>Subcontractor Total &gt;</b>							
<b>DBE Total &gt;</b>							

**NOTE: THIS INFORMATION IS USED TO TRACK AND REPORT ANTICIPATED DBE PARTICIPATION IN ALL  
FEDERALLY FUNDED MAINE DOT CONTRACTS. THE ANTICIPATED DBE AMOUNT IS VOLUNTARY AND WILL  
NOT BECOME A PART OF THE CONTRACTUAL TERMS.**

Equal Opportunity Use:

Form received: \_\_\_/\_\_\_/\_\_\_ Verified by: \_\_\_\_\_

FHWA       FTA       FAA

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

Rev. 05/13

**Maine Department of Transportation Civil Rights Office**

**Directory of Certified Disadvantaged Business Enterprises**

**Listing can be found at:**

<http://www.maine.gov/mdot/civilrights/dbe.htm>

**For additional information and guidance contact:**

**Civil Rights Office at (207) 624-3066**

*It is the responsibility of the Contractor to access the DBE Directory at this site in order to have the most current listing.*

### **Vendor Registration**

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

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

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

Scaled Bids addressed to the Maine Department of Transportation, Augusta, Maine 04333 and endorsed on the wrapper "Bids for **Highway Reconstruction** in the city of **Ellsworth**" will be received from contractors at the Reception Desk, Maine DOT Building, Capitol Street, Augusta, Maine, until 11:00 o'clock A.M. (prevailing time) on May 4, 2016 and at that time and place publicly opened and read. Bids will be accepted from all bidders. The lowest responsive bidder must have completed, or successfully complete, a (Highway Construction prequalification), or project specific prequalification to be considered for the award of this contract. **We now accept electronic bids for those bid packages posted on the bidx.com website. Electronic bids do not have to be accompanied by paper bids. Please note: the Department will accept a facsimile of the bid bond; however, the original bid bond must then be received at the MDOT Contract Section within 72 hours of the bid opening.** Until further notice, dual bids (one paper, one electronic) will be accepted, with the paper copy taking precedence.

Description: Maine Federal Aid Project No. AC-STP-1919(600)X, WIN. 19196.00

Location: In Hancock County, project is located on US. Rte.1A beginning 0.35 mi. north of Route 179 (North St.) and extends southerly 1.22 miles to the intersection of State and Oak St's.

Outline of Work: Highway Reconstruction and other incidental work.

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

Plans, specifications and bid forms may be seen at the Maine DOT Building in Augusta, Maine and at the Department of Transportation's Regional Office in 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. Full size plans \$196.00 (\$206.00 by mail). Half size plans \$98.00 (\$102.50 by mail), Bid Book \$10 (\$13 by mail), Single Sheets \$2, payment in advance, all non-refundable.

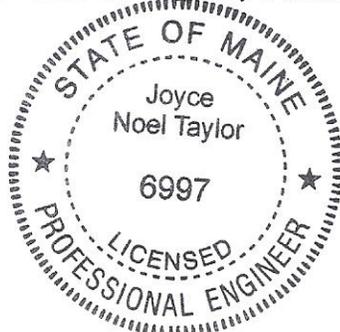
Each Bid must be made upon blank forms provided by the Department and must be accompanied by a bid bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of \$160,000.00 payable to Treasurer, State of Maine as a Bid guarantee. A Contract Performance Surety Bond and a Contract Payment Surety Bond, each in the amount of 100 percent of the Contract price, will be required of the successful Bidder.

This Contract is subject to all applicable Federal Laws. This contract is subject to compliance with the Disadvantaged Business Enterprise program requirements as set forth by the Maine Department of Transportation.

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

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

Augusta, Maine  
April 13, 2016



JOYCE NOEL TAYLOR P. E.  
CHIEF ENGINEER

# NOTICE

All bids for Federal Projects **shall** 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. Failure to submit the form with the bid will be considered a curable defect.

**SPECIAL PROVISION 102.7.3**  
**ACKNOWLEDGMENT OF BID AMENDMENTS**

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

Amendment Number	Date

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

**CONTRACTOR**

\_\_\_\_\_  
Date

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

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

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019196.00

Project(s): 019196.00

SECTION: 1 PROJECT ITEMS

Alt Set ID: Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0010	201.11 CLEARING	0.800 AC	_____	_____	_____	_____
0020	201.23 REMOVING SINGLE TREE TOP ONLY	32.000 EA	_____	_____	_____	_____
0030	201.24 REMOVING STUMP	41.000 EA	_____	_____	_____	_____
0040	202.15 REMOVING MANHOLE OR CATCH BASIN	39.000 EA	_____	_____	_____	_____
0050	202.202 REMOVING PAVEMENT SURFACE	3,050.000 SY	_____	_____	_____	_____
0060	202.203 PAVEMENT BUTT JOINTS	330.000 SY	_____	_____	_____	_____
0070	203.20 COMMON EXCAVATION	17,705.000 CY	_____	_____	_____	_____
0080	203.21 ROCK EXCAVATION	520.000 CY	_____	_____	_____	_____
0090	203.2312 HEALTH AND SAFETY PLAN	LUMP SUM		LUMP SUM	_____	_____
0100	203.2333 DISPOSAL OF SPECIAL EXCAVATION	21.000 T	_____	_____	_____	_____
0110	203.25 GRANULAR BORROW	475.000 CY	_____	_____	_____	_____
0120	203.33 SPECIAL FILL	34.000 CY	_____	_____	_____	_____

Maine Department of Transportation

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Alt Set ID: Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0130	206.061 STRUCTURAL EARTH EXCAVATION - DRAINAGE AND MINOR STRUCTURES, BELOW GRADE	200.000 CY	_____	 _____	_____	 _____
0140	206.07 STRUCTURAL ROCK EXCAVATION - DRAINAGE AND MINOR STRUCTURES	50.000 CY	_____	 _____	_____	 _____
0150	304.15 AGGREGATE BASE COURSE - TYPE B	19,075.000 CY	_____	 _____	_____	 _____
0160	310.24 PLANT MIX RECYCLED ASPHALT PAVEMENT - 4 INCH DEPTH	24,800.000 SY	_____	 _____	_____	 _____
0170	403.2081 12.5 MM POLYMER MODIFIED HOT MIX ASPHALT	3,365.000 T	_____	 _____	_____	 _____
0180	403.209 HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTALS)	750.000 T	_____	 _____	_____	 _____
0190	403.211 HOT MIX ASPHALT (SHIMMING)	26.000 T	_____	 _____	_____	 _____
0200	403.213 HOT MIX ASPHALT 12.5 MM BASE	6,860.000 T	_____	 _____	_____	 _____
0210	409.15 BITUMINOUS TACK COAT - APPLIED	1,550.000 G	_____	 _____	_____	 _____
0220	508.13 SHEET WATERPROOFING MEMBRANE	LUMP SUM		LUMP SUM	_____	 _____
0230	511.07 COFFERDAM: UPSTREAM	LUMP SUM		LUMP SUM	_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019196.00

Project(s): 019196.00

SECTION: 1 PROJECT ITEMS

Alt Set ID:

Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0240	511.07 COFFERDAM: DOWNSTREAM	LUMP SUM		LUMP SUM	_____	_____
0250	524.30 TEMPORARY STRUCTURAL SUPPORT	1.000 EA	_____	_____	_____	_____
0260	534.71 PRECAST CONCRETE BOX CULVERT DAVIS BROOK	LUMP SUM		LUMP SUM	_____	_____
0270	534.71 PRECAST CONCRETE BOX CULVERT @ 1352+00 RT.	LUMP SUM		LUMP SUM	_____	_____
0280	603.132 8" CULV PIPE OPTION III	16.000 LF	_____	_____	_____	_____
0290	603.155 12 INCH REINFORCED CONCRETE PIPE CLASS III	39.000 LF	_____	_____	_____	_____
0300	603.159 12 INCH CULVERT PIPE OPTION III	490.000 LF	_____	_____	_____	_____
0310	603.16 15 INCH CULVERT PIPE OPTION I	220.000 LF	_____	_____	_____	_____
0320	603.165 15 INCH REINFORCED CONCRETE PIPE CLASS III	260.000 LF	_____	_____	_____	_____
0330	603.169 15 INCH CULVERT PIPE OPTION III	215.000 LF	_____	_____	_____	_____
0340	603.175 18 INCH REINFORCED CONCRETE PIPE CLASS III	320.000 LF	_____	_____	_____	_____
0350	603.179 18 INCH CULVERT PIPE OPTION III	21.000 LF	_____	_____	_____	_____

Maine Department of Transportation

Proposal Schedule of Items

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Project(s): 019196.00

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Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0360	603.195 24 INCH REINFORCED CONCRETE PIPE CLASS III	580.000 LF	_____	 _____	_____	 _____
0370	603.1952 24 INCH REINFORCED CONCRETE PIPE CLASS V	780.000 LF	_____	 _____	_____	 _____
0380	603.199 24 INCH CULVERT PIPE OPTION III	100.000 LF	_____	 _____	_____	 _____
0390	603.205 30 INCH REINFORCED CONCRETE PIPE CLASS III	130.000 LF	_____	 _____	_____	 _____
0400	603.215 36 INCH REINFORCED CONCRETE PIPE CLASS III	100.000 LF	_____	 _____	_____	 _____
0410	603.4105 CONCRETE PIPE COLLAR	1.000 EA	_____	 _____	_____	 _____
0420	603.55 CONCRETE PIPE TIES	12.000 GP	_____	 _____	_____	 _____
0430	604.072 CATCH BASIN TYPE A1-C	28.500 EA	_____	 _____	_____	 _____
0440	604.0752 96" CATCHBASIN TYPE A1-C	4.000 EA	_____	 _____	_____	 _____
0450	604.076 60 INCH CATCH BASIN TYPE A1-C	10.000 EA	_____	 _____	_____	 _____
0460	604.09 CATCH BASIN TYPE B1	7.500 EA	_____	 _____	_____	 _____
0470	604.092 CATCH BASIN TYPE B1-C	4.000 EA	_____	 _____	_____	 _____

Maine Department of Transportation

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Project(s): 019196.00

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Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0480	604.093 60 INCH CATCH BASIN TYPE B1	2.500 EA	_____	 _____	_____	 _____
0490	604.0956 96 INCH CATCH BASIN TYPE B1	2.500 EA	_____	 _____	_____	 _____
0500	604.0957 96" CATCH BASIN TYPE B1-C	1.200 EA	_____	 _____	_____	 _____
0510	604.096 60 INCH CATCH BASIN TYPE B1-C	2.500 EA	_____	 _____	_____	 _____
0520	604.097 72 INCH CATCH BASIN TYPE B1-C	1.000 EA	_____	 _____	_____	 _____
0530	604.161 ALTERING CATCH BASIN	1.000 EA	_____	 _____	_____	 _____
0540	604.166 REBUILDING MANHOLE	4.000 EA	_____	 _____	_____	 _____
0550	604.18 ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	21.000 EA	_____	 _____	_____	 _____
0560	604.243 CATCH BASIN TYPE F3-C	1.000 EA	_____	 _____	_____	 _____
0570	604.244 CATCH BASIN TYPE F4	5.000 EA	_____	 _____	_____	 _____
0580	604.245 CATCH BASIN TYPE F4-C	3.000 EA	_____	 _____	_____	 _____
0590	604.246 CATCH BASIN TYPE F5	3.000 EA	_____	 _____	_____	 _____
0600	604.247 CATCH BASIN TYPE F5-C	6.000 EA	_____	 _____	_____	 _____

Maine Department of Transportation

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Proposal ID: 019196.00

Project(s): 019196.00

SECTION: 1 PROJECT ITEMS

Alt Set ID: Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0610	604.248 CATCH BASIN TYPE F6	3.000 EA	_____	 _____	_____	 _____
0620	604.249 CATCH BASIN TYPE F6-C	2.000 EA	_____	 _____	_____	 _____
0630	604.252 CATCH BASIN TYPE A5-C	3.000 EA	_____	 _____	_____	 _____
0640	604.26 CATCH BASIN TYPE B5	1.000 EA	_____	 _____	_____	 _____
0650	605.09 6 INCH UNDERDRAIN TYPE B	5,650.000 LF	_____	 _____	_____	 _____
0660	605.11 12 INCH UNDERDRAIN TYPE C	900.000 LF	_____	 _____	_____	 _____
0670	605.12 15 INCH UNDERDRAIN TYPE C	2,000.000 LF	_____	 _____	_____	 _____
0680	605.13 18 INCH UNDERDRAIN TYPE C	2,150.000 LF	_____	 _____	_____	 _____
0690	605.15 24 INCH UNDERDRAIN TYPE C	940.000 LF	_____	 _____	_____	 _____
0700	606.1721 BRIDGE TRANSITION - TYPE 1	2.000 EA	_____	 _____	_____	 _____
0710	606.23 GUARDRAIL TYPE 3C - SINGLE RAIL	637.500 LF	_____	 _____	_____	 _____
0720	606.232 GUARDRAIL TYPE 3C - OVER 15 FOOT RADIUS	25.000 LF	_____	 _____	_____	 _____
0730	606.265 TERMINAL END - SINGLE RAIL - GALVANIZED STEEL	1.000 EA	_____	 _____	_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019196.00

Project(s): 019196.00

SECTION: 1 PROJECT ITEMS

Alt Set ID:

Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0740	606.353 REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	12.000 EA	_____	 _____	_____	 _____
0750	606.356 UNDERDRAIN DELINEATOR POST	28.000 EA	_____	 _____	_____	 _____
0760	606.47 SINGLE WOOD POST	28.000 EA	_____	 _____	_____	 _____
0770	606.51 MULTIPLE MAILBOX SUPPORT	3.000 EA	_____	 _____	_____	 _____
0780	606.79 GUARDRAIL 350 FLARED TERMINAL	5.000 EA	_____	 _____	_____	 _____
0790	607.25 REMOVE AND RESET CHAIN LINK FENCE	40.000 LF	_____	 _____	_____	 _____
0800	608.07 PLAIN CONCRETE SIDEWALK	110.000 SY	_____	 _____	_____	 _____
0810	608.10 BRICK SIDEWALK, REMOVE AND REBUILD	17.000 SY	_____	 _____	_____	 _____
0820	608.26 CURB RAMP DETECTABLE WARNING FIELD	96.000 SF	_____	 _____	_____	 _____
0830	609.11 VERTICAL CURB TYPE 1	8,800.000 LF	_____	 _____	_____	 _____
0840	609.111 SPECIAL GRANITE CURB - 24"	82.000 LF	_____	 _____	_____	 _____
0850	609.1111 SPECIAL GRANITE CURB - 39"	170.000 LF	_____	 _____	_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019196.00

Project(s): 019196.00

SECTION: 1 PROJECT ITEMS

Alt Set ID: Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0860	609.12 VERTICAL CURB TYPE 1 - CIRCULAR	560.000 LF	_____	 _____	_____	 _____
0870	609.19 VERTICAL CURB TYPE 2	7.000 LF	_____	 _____	_____	 _____
0880	609.234 TERMINAL CURB TYPE 1 - 4 FOOT	41.000 EA	_____	 _____	_____	 _____
0890	609.2341 TERMINAL CURB TYPE 1 - 4 FOOT - CIRCULAR	5.000 EA	_____	 _____	_____	 _____
0900	609.238 TERMINAL CURB TYPE 1 - 8 FOOT	61.000 EA	_____	 _____	_____	 _____
0910	609.2381 TERMINAL CURB TYPE 1 - 8' CIRCULAR	8.000 EA	_____	 _____	_____	 _____
0920	609.26 CURB TRANSITION SECTION B TYPE 1	2.000 EA	_____	 _____	_____	 _____
0930	609.31 CURB TYPE 3	1,420.000 LF	_____	 _____	_____	 _____
0940	609.34 CURB TYPE 5	36.000 LF	_____	 _____	_____	 _____
0950	609.35 CURB TYPE 5 - CIRCULAR	78.000 LF	_____	 _____	_____	 _____
0960	610.08 PLAIN RIPRAP	110.000 CY	_____	 _____	_____	 _____
0970	610.16 HEAVY RIPRAP	78.000 CY	_____	 _____	_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019196.00

Project(s): 019196.00

SECTION: 1 PROJECT ITEMS

Alt Set ID:

Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
0980	610.210 STREAM CHANNEL ROCK	20.000 CY	_____	 _____	_____	 _____
0990	613.319 EROSION CONTROL BLANKET	490.000 SY	_____	 _____	_____	 _____
1000	615.07 LOAM	1,500.000 CY	_____	 _____	_____	 _____
1010	618.13 SEEDING METHOD NUMBER 1	78.000 UN	_____	 _____	_____	 _____
1020	618.14 SEEDING METHOD NUMBER 2	59.000 UN	_____	 _____	_____	 _____
1030	618.141 SEEDING METHOD NUMBER 3	25.000 UN	_____	 _____	_____	 _____
1040	619.1201 MULCH - PLAN QUANTITY	161.000 UN	_____	 _____	_____	 _____
1050	620.58 EROSION CONTROL GEOTEXTILE	300.000 SY	_____	 _____	_____	 _____
1060	626.11 PRECAST CONCRETE JUNCTION BOX	1.000 EA	_____	 _____	_____	 _____
1070	626.21 METALLIC CONDUIT	10.000 LF	_____	 _____	_____	 _____
1080	626.22 NON-METALLIC CONDUIT	525.000 LF	_____	 _____	_____	 _____
1090	626.31 18 INCH FOUNDATION	2.000 EA	_____	 _____	_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019196.00

Project(s): 019196.00

SECTION: 1 PROJECT ITEMS

Alt Set ID: Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
1100	626.332 30 INCH DIAMATER GREATER THAN 8 FEET LONG & 36 INCH DIAMETER, 42 INCH DIAMETER FOUNDATION	11.000 CY	_____	 _____	_____	 _____
1110	626.35 CONTROLLER CABINET FOUNDATION	1.000 EA	_____	 _____	_____	 _____
1120	627.407 REFLECTORIZED PLASTIC WHITE OR YELLOW PAVEMENT MARKING	2,160.000 SF	_____	 _____	_____	 _____
1130	627.733 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	28,200.000 LF	_____	 _____	_____	 _____
1140	627.75 WHITE OR YELLOW PAVEMENT & CURB MARKING	105.000 SF	_____	 _____	_____	 _____
1150	627.78 TEMPORARY 4 INCH PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	28,200.000 LF	_____	 _____	_____	 _____
1160	629.05 HAND LABOR, STRAIGHT TIME	40.000 HR	_____	 _____	_____	 _____
1170	631.10 AIR COMPRESSOR (INCLUDING OPERATOR)	20.000 HR	_____	 _____	_____	 _____
1180	631.11 AIR TOOL (INCLUDING OPERATOR)	20.000 HR	_____	 _____	_____	 _____
1190	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	25.000 HR	_____	 _____	_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019196.00

Project(s): 019196.00

SECTION: 1 PROJECT ITEMS

Alt Set ID:

Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
1200	631.132 SMALL BULLDOZER (INCLUDING OPERATOR)	20.000 HR	_____	 _____	_____	 _____
1210	631.14 GRADER (INCLUDING OPERATOR)	20.000 HR	_____	 _____	_____	 _____
1220	631.15 ROLLER, EARTH AND BASE COURSE (INCLUDING OPERATOR )	20.000 HR	_____	 _____	_____	 _____
1230	631.16 ROLLER, PAVEMENT (INCLUDING OPERATOR)	20.000 HR	_____	 _____	_____	 _____
1240	631.172 TRUCK - LARGE (INCLUDING OPERATOR)	20.000 HR	_____	 _____	_____	 _____
1250	631.18 CHAIN SAW RENTAL (INCLUDING OPERATOR)	20.000 HR	_____	 _____	_____	 _____
1260	631.20 STUMP CHIPPER (INCLUDING OPERATOR)	40.000 HR	_____	 _____	_____	 _____
1270	631.22 FRONT END LOADER (INCLUDING OPERATOR)	20.000 HR	_____	 _____	_____	 _____
1280	631.32 CULVERT CLEANER (INCLUDING OPERATOR)	10.000 HR	_____	 _____	_____	 _____
1290	639.18 FIELD OFFICE TYPE A	1.000 EA	_____	 _____	_____	 _____
1300	642.15 PRECAST CONCRETE STEPS	3.000 EA	_____	 _____	_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019196.00

Project(s): 019196.00

SECTION: 1 PROJECT ITEMS

Alt Set ID:

Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
1310	643.71 TRAFFIC SIGNAL MODIFICATION RTE.1A/ FOREST AVE.	LUMP SUM	LUMP	SUM	_____	_____
1320	643.83 VIDEO DETECTION SYSTEM	LUMP SUM	LUMP	SUM	_____	_____
1330	643.91 MAST ARM POLE	4.000 EA	_____	_____	_____	_____
1340	643.92 PEDESTAL POLE	2.000 EA	_____	_____	_____	_____
1350	645.103 DEMOUNT GUIDE SIGN	24.000 EA	_____	_____	_____	_____
1360	645.106 DEMOUNT REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN	96.000 EA	_____	_____	_____	_____
1370	645.113 REINSTALL GUIDE SIGN	12.000 EA	_____	_____	_____	_____
1380	645.116 REINSTALL REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGN	11.000 EA	_____	_____	_____	_____
1390	645.251 ROADSIDE GUIDE SIGNS, TYPE I	49.500 SF	_____	_____	_____	_____
1400	645.271 REGULATORY, WARNING, CONFIRMATION AND ROUTE MARKER ASSEMBLY SIGNS, TYPE I	409.000 SF	_____	_____	_____	_____
1410	648.312 BALLAST	150.000 T	_____	_____	_____	_____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019196.00

Project(s): 019196.00

SECTION: 1 PROJECT ITEMS

Alt Set ID: Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
1420	652.312 TYPE III BARRICADE	17.000 EA	_____	 _____	_____	 _____
1430	652.33 DRUM	22.000 EA	_____	 _____	_____	 _____
1440	652.34 CONE	72.000 EA	_____	 _____	_____	 _____
1450	652.35 CONSTRUCTION SIGNS	470.000 SF	_____	 _____	_____	 _____
1460	652.36 MAINTENANCE OF TRAFFIC CONTROL DEVICES	379.000 CD	_____	 _____	_____	 _____
1470	652.38 FLAGGER	16,000.000 HR	_____	 _____	_____	 _____
1480	652.41 PORTABLE CHANGEABLE MESSAGE SIGN	2.000 EA	_____	 _____	_____	 _____
1490	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP SUM		 LUMP SUM	_____	 _____
1500	659.10 MOBILIZATION	LUMP SUM		 LUMP SUM	_____	 _____
1510	674.10 PREFABRICATED CONCRETE MODULAR GRAVITY WALL	220.000 SF	_____	 _____	_____	 _____
1520	801.03 TEST PITS	5.000 EA	_____	 _____	_____	 _____
1530	801.07 TEMPORARY SEWER BYPASS	340.000 LF	_____	 _____	_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019196.00

Project(s): 019196.00

SECTION: 1 PROJECT ITEMS

Alt Set ID:

Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
1540	801.131 10" FORCE MAIN	275.000 LF	_____	 _____	_____	 _____
1550	801.18 12 INCH PVC SANITARY SEWER (SDR-35)	125.000 LF	_____	 _____	_____	 _____
1560	802.16 4 FOOT DIAMETER PRECAST SEWER MANHOLES	1.000 EA	_____	 _____	_____	 _____
1570	812.162 ADJUSTING SEWER MANHOLE TO GRADE	19.000 EA	_____	 _____	_____	 _____
1580	812.164 REBUILDING SEWER MANHOLE	4.000 EA	_____	 _____	_____	 _____
1590	812.17 SEWER DROP MANHOLE	1.000 EA	_____	 _____	_____	 _____
1600	822.3152 TAPPING SLEEVE AND VALVE 2"	3.000 EA	_____	 _____	_____	 _____
1610	822.3152 TAPPING SLEEVE AND VALVE 6"	2.000 EA	_____	 _____	_____	 _____
1620	822.3152 TAPPING SLEEVE AND VALVE 8"	1.000 EA	_____	 _____	_____	 _____
1630	822.3254 8"INSERTION VALVE	1.000 EA	_____	 _____	_____	 _____
1640	822.33 6 INCH CLASS 52 DUCTILE IRON PIPE	920.000 LF	_____	 _____	_____	 _____
1650	822.34 8 INCH CLASS 52 DUCTILE IRON PIPE	1,180.000 LF	_____	 _____	_____	 _____

## Maine Department of Transportation

## Proposal Schedule of Items

Proposal ID: 019196.00

Project(s): 019196.00

SECTION: 1 PROJECT ITEMS

Alt Set ID:

Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
1660	822.354 10" INSERTION VALVE	3.000 EA	_____	 _____	_____	 _____
1670	822.36 12 INCH DUCTILE IRON PIPE	2,630.000 LF	_____	 _____	_____	 _____
1680	823.311 12 INCH GATE VALVE WITH BOX	3.000 EA	_____	 _____	_____	 _____
1690	823.3251 8 INCH GATE VALVE WITH BOX	3.000 EA	_____	 _____	_____	 _____
1700	823.33 6 INCH GATE VALVE WITH BOX	2.000 EA	_____	 _____	_____	 _____
1710	824.30 FIRE HYDRANT	7.000 EA	_____	 _____	_____	 _____
1720	824.32 REMOVE/RESET HYDRANT	5.000 EA	_____	 _____	_____	 _____
1730	825.312 3/4 INCH CURB STOP	34.000 EA	_____	 _____	_____	 _____
1740	825.323 2" BALL VALVE	1.000 EA	_____	 _____	_____	 _____
1750	825.331 1" CURB STOP	1.000 EA	_____	 _____	_____	 _____
1760	825.41 3/4 COPPER SERVICE	900.000 LF	_____	 _____	_____	 _____
1770	825.422 2" PLASTIC SERVICE	135.000 LF	_____	 _____	_____	 _____
1780	825.43 1" COPPER SERVICE	50.000 LF	_____	 _____	_____	 _____

Maine Department of Transportation

Proposal Schedule of Items

Proposal ID: 019196.00

Project(s): 019196.00

SECTION: 1 PROJECT ITEMS

Alt Set ID:

Alt Mbr ID:

Contractor: \_\_\_\_\_

Proposal Line Number	Item ID Description	Approximate Quantity and Units	Unit Price		Bid Amount	
			Dollars	Cents	Dollars	Cents
1790	825.53 6 " WATER SERVICE - RECONNECT	1.000 EA	_____	 _____	_____	 _____
1800	825.541 TEMPORARY WATER MAIN	3,980.000 LF	_____	 _____	_____	 _____
1810	827.301 ROCK EXCAVATION WATER MAIN	20.000 CY	_____	 _____	_____	 _____
1820	827.302 UNSUITABLE SOIL EXCAVATION - BELOW GRADE	100.000 CY	_____	 _____	_____	 _____
1830	827.312 SELECT BACKFILL	100.000 CY	_____	 _____	_____	 _____
1840	827.33 TRENCH INSULATION	975.000 LF	_____	 _____	_____	 _____
1850	832.07 OWNERS TESTING ALLOWANCE	LUMP SUM		 LUMP SUM	_____	 _____
1860	841.481 REMOVABLE BOLLARD	3.000 EA	_____	 _____	_____	 _____
Section: 1			Total:		_____	 _____
			Total Bid:		_____	 _____

## **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 \_\_\_\_\_, with its principal place of business located at \_\_\_\_\_

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

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

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, **WIN 19196.00** for **Highway Reconstruction** in the city of **Ellsworth**, County of **Hancock**, 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 **June 17, 2017**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, November 2014 Edition and related Special Provisions.

**C. Price.**

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is \_\_\_\_\_

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

**D. Contract.**

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

**E. Certifications.**

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

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

**F. Offer.**

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

**WIN. 19196.00 - Highway Reconstruction - in the city of Ellsworth,**

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

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

As Offeror also agrees:

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

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

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

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

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

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

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

CONTRACTOR

\_\_\_\_\_  
Date

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

\_\_\_\_\_  
Witness

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

**G. Award.**

Your offer is hereby accepted.  
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_  
Date

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

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

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

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

The Contractor agrees to complete all Work as specified or indicated in the Contract including Extra Work in conformity with the Contract, **WIN 19196.00** for **Highway Reconstruction** in the city of **Ellsworth**, County of **Hancock**, 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 **June 17, 2017**. Further, the Department may deduct from moneys otherwise due the Contractor, not as a penalty, but as Liquidated Damages in accordance with Sections 107.7 and 107.8 of the State of Maine Department of Transportation Standard Specifications, November 2014 Edition and related Special Provisions.

**C. Price.**

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts of the required Performance Surety Bond and Payment Surety Bond, and that the amount of this offer is \_\_\_\_\_

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

**D. Contract.**

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

**E. Certifications.**

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

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

**F. Offer.**

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

**WIN. 19196.00 - Highway Reconstruction - in the city of Ellsworth,**

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

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

As Offeror also agrees:

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

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

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

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

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

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

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

CONTRACTOR

\_\_\_\_\_  
Date

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

\_\_\_\_\_  
Witness

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

**G. Award.**

Your offer is hereby accepted.  
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_  
Date

\_\_\_\_\_  
By: David Bernhardt, 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 South Nowhere, County of Washington, Maine. The Work includes construction, maintenance during construction, warranty as provided in the Contract, and other incidental work.

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

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

**B. Time.**

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

**C. Price.**

The quantities given in the Schedule of Items of the Bid Package will be used as the basis for determining the original Contract amount and for determining the amounts 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, November 2014 Edition, Standard Details November 2014 Edition, Supplemental Specifications, Special Provisions, Contract Agreement, and Contract Bonds. It is agreed and understood that this Contract will be governed by the documents listed above.

**E. Certifications.**

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

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

**F. Offer.**

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

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

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

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

As Offeror also agrees:

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

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

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

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

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

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

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

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

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

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

**G. Award.**

Your offer is hereby accepted.  
documents referenced herein.

This award consummates the Contract, and the

MAINE DEPARTMENT OF TRANSPORTATION

\_\_\_\_\_  
Date

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

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

BOND # \_\_\_\_\_

CONTRACT PERFORMANCE BOND  
(Surety Company Form)

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

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

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

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

WITNESSES:

SIGNATURES:

CONTRACTOR:

Signature.....

.....

Print Name Legibly .....

Print Name Legibly .....

SURETY:

Signature .....

.....

Print Name Legibly .....

Print Name Legibly .....

SURETY ADDRESS:

NAME OF LOCAL AGENCY:

.....  
.....  
.....

ADDRESS .....  
.....  
.....

TELEPHONE.....

.....

BOND # \_\_\_\_\_

CONTRACT PAYMENT BOND  
(Surety Company Form)

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

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

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

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

WITNESS:

SIGNATURES:

CONTRACTOR:

Signature.....

.....

Print Name Legibly .....

Print Name Legibly .....

SURETY:

Signature.....

.....

Print Name Legibly .....

Print Name Legibly .....

SURETY ADDRESS:

NAME OF LOCAL AGENCY:

.....

ADDRESS .....

.....

.....

TELEPHONE .....

.....

General Decision Number: ME160040 01/08/2016 ME40

Superseded General Decision Number: ME20150040

State: Maine

Construction Type: Highway

County: Hancock County in Maine.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/08/2016

\* ENGI0004-011 04/01/2014

	Rates	Fringes
POWER EQUIPMENT OPERATOR:		
Asphalt Roller, Mechanic, Paver.....	\$ 20.75	10.84

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TEAM0340-002 08/01/2013

	Rates	Fringes
TRUCK DRIVER		
1 and 2 Axle.....	\$ 14.50	17.5825
3 Axle.....	\$ 14.60	17.5825
Low Boy.....	\$ 14.75	17.5825

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SUME2011-035 09/14/2011

	Rates	Fringes
CARPENTER, Includes Form Work....	\$ 18.34	2.84
INSTALLER - GUARDRAIL.....	\$ 11.53	1.55
IRONWORKER, REINFORCING.....	\$ 18.71	0.00

LABORER: Asphalt Raker.....	\$ 13.91	2.94
LABORER: Flagger.....	\$ 9.00	0.00
LABORER: Landscape.....	\$ 16.81	0.16
LABORER: Pipelayer.....	\$ 13.21	1.58
LABORER: Wheelman.....	\$ 13.81	1.47
LABORER: Common or General, Including Highway/Parking Lot Striping.....	\$ 11.77	2.07
OPERATOR: Backhoe.....	\$ 16.18	4.98
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 16.73	5.57
OPERATOR: Bulldozer.....	\$ 13.90	2.95
OPERATOR: Cold Planer.....	\$ 17.63	0.00
OPERATOR: Crane.....	\$ 21.21	6.19
OPERATOR: Excavator.....	\$ 14.91	3.28
OPERATOR: Grader/Blade.....	\$ 18.43	5.72
OPERATOR: Loader.....	\$ 14.60	3.09
OPERATOR: Milling Machine Reclaimer Combo.....	\$ 16.81	0.80
OPERATOR: Screed.....	\$ 15.34	3.67
OPERATOR: Roller (Earth).....	\$ 11.55	1.72
TRUCK DRIVER, Includes All Dump Trucks.....	\$ 11.95	3.22
TRUCK DRIVER: Semi-Trailer Truck.....	\$ 16.36	9.09

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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)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date

for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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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:

Administrative Review Board

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

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**SPECIAL PROVISIONS**  
**SECTION 104**  
**Utilities**

**UTILITY COORDINATION**

The contractor has primary responsibility for coordinating their work with utilities after contract award. The contractor shall communicate directly with the utilities regarding any utility work necessary to maintain the contractor's schedule and prevent project construction delays. The contractor shall notify the resident of any issues.

**THE CONTRACTOR SHALL PLAN AND CONDUCT THEIR WORK ACCORDINGLY.**

**MEETING**

A Pre-Construction Utility Conference, as defined in Subsection 104.4.6 of the Standard Specifications **IS REQUIRED.**

**GENERAL INFORMATION**

These Special Provisions outline the arrangements that have been made by the Department for utility work to be undertaken in conjunction with this project. The following list identifies all known utilities having facilities presently located within the limits of this project or intending to install facilities during project construction.

Utilities have been notified and will be furnished a copy of the project specification.

**Overview & Utility Contact Information:**

<b>Utility/Railroad</b>	<b>Aerial</b>	<b>Underground</b>	<b>Railroad</b>	<b>Contact Name</b>	<b>Contact Number</b>
<b>City of Ellsworth</b>	<b>X</b>	<b>X</b>		<b>David Cole</b>	<b>669-6601</b>
<b>Ellsworth Sewer Department</b>		<b>X</b>		<b>Mike Harris</b>	<b>664-4404</b>
<b>Ellsworth Water Department</b>		<b>X</b>		<b>Larry Wilson</b>	<b>266-2526</b>
<b>Emera Maine</b>	<b>X</b>	<b>X</b>		<b>Bob Fairweather</b>	<b>461-0324</b>
<b>FairPoint Communications</b>	<b>X</b>	<b>X</b>		<b>Sarah Schaeffer</b>	<b>712-7930</b>
<b>MaineDOT Railroad</b>			<b>X</b>	<b>Jeff Pitcher</b>	<b>215-7252</b>
<b>OTT Communications</b>	<b>X</b>	<b>X</b>		<b>Jim Taplin</b>	<b>615-8431</b>
<b>Time Warner Cable</b>	<b>X</b>			<b>John Goode</b>	<b>458-8037</b>
<b>Union River Telephone</b>	<b>X</b>			<b>Kevin Copeland</b>	<b>479-4074</b>
<b>University of Maine Systems</b>	<b>X</b>			<b>Eric Damboise</b>	<b>949-3548</b>

Temporary utility adjustments **ARE NOT** anticipated on this project. However, should the contractor choose to have any poles temporarily relocated, all work will be done by the Pole Owner at the contractor's request and expense at no additional cost to the Department.

Unless otherwise specified, any underground utility facilities shown on the project plans represent approximate locations gathered from available information. The Department cannot certify the level of accuracy of this data. Underground facilities indicated on the topographic sheets (plan views) have been collected from historical records and/or on-site designations provided by the respective utility companies. Underground facilities indicated on the cross-sections have been carried over from the plan view data and may also include further

approximations of the elevations (depths) based upon straight-line interpolation from the nearest manholes, gate valves, or test pits.

All adjustments are to be made by the respective utility unless otherwise specified herein.

All clearing and tree removal in areas where utilities are involved must be completed before the utilities are able to relocate their facilities.

Fire hydrants shall not be disturbed until all necessary work has been accomplished to provide proper fire protection.

Utility working days are Monday through Friday. Times are estimated on the basis of a single crew for each utility. Any times and dates mentioned are **estimates only** and are dependent upon favorable weather, working conditions, and freedom from emergencies. The Contractor shall have no claim against the Department if they are exceeded.

It is the responsibility of the contractor with the Utility Pole owner, to layout all of the proposed pole locations in the field prior to the start of utility relocations. Should any adjustments be needed, the Utility will document adjustments and inform the Department prior to utility relocations.

Construction of any spot cuts and fills in excess of 2 feet and adequate access to new pole locations must be completed prior to utility relocations.

## AERIAL

### *Summary:*

Utility	Pole Set	New Wires/Cables	Trans. Wires/Cables	Remove Poles	Estimated Working Days
Emera Maine	X	X	X	X	55
Time Warner Cable		X	X		15
University of Maine Systems/OTT Communications		X	X		10
Union River Telephone			X		2
FairPoint Communications		X	X		65
<b>Total:</b>					147

### *Utility Specific Issues:*

#### **Emera Maine**

Emera Maine has approximately **61 poles** to set as per the pole list included in this specification and has conductor to transfer to the new pole locations/run new conductor. Emera will require **two weeks' notice** to schedule work. Once work is scheduled Emera estimates **55 working days** to set the poles and complete their transfers/run conductor. Emera will remove the old electric poles once all transfers are complete.

#### **Time Warner Cable**

Time Warner Cable has cables to transfer to the new pole locations/run new cables. After Emera has completed their work, TWC shall begin their work. TWC will require **two weeks' notice** to schedule work. Once work is scheduled TWC estimates **15 working days** to complete their work.

**University of Maine Systems/OTT Communications**

University of Maine Systems/OTT Communications has cables to transfer to the new pole locations/run new cables. After TWC has completed their work, UMaine Systems/OTT shall begin their work. UMaine Systems/OTT will require **two weeks' notice** to schedule work. Once work is scheduled UMaine Systems/OTT estimates **10 working days** to complete their work.

**Union River Telephone**

Union River Telephone has cables to transfer to the new pole locations. After UMaine Systems/OTT Communications has completed their transfers, Union River Telephone shall begin their work. Union River Telephone will require **two weeks' notice** to schedule work. Once work is scheduled Union River Telephone estimates **2 working days** to complete their work.

**FairPoint Communications**

FairPoint Communications has cables to transfer to the new pole locations/run new cables. After Union River Telephone has completed their transfers, FairPoint shall begin their work. FairPoint will require **two weeks' notice** to schedule work. Once work is scheduled FairPoint estimates **65 working days** to complete their work.

**Pole List:**

Existing Pole #	Existing Station	Left/Right		Existing Offset	Proposed Station	Left/Right		Proposed Offset	Comments
		LT	RT			LT	RT		
<b>Route 1A</b>									
#718	1293+78.99	X		40.65					OK
#719	1295+15.66	X		45.07					OK
720	1296+56.32	X		48.60					OK
721	1297+97.25	X		43.01					OK
SERVICE	1298+47.31		X	104.26					OK
73/7	1298+81.66		X	31.05					OK
722	1299+48.53	X		30.78					REMOVE
#6	1301+14.51		X	33.42	S/S		X	25.0	REPLACE
6D	1301+32.66	X		16.14					ELIMINATE
5 1/3	1302+97.84		X	28.58	S/S		X	28.0	REPLACE
73/5 1/2	1304+76.73		X	22.53	S/S		X	28.0	MOVE
70/73/5	1306+61.67		X	19.95	1306+37		X	28.0	MOVE
#4	1308+13.87		X	15.30	S/S		X	28.0	MOVE
#2D	1309+77.02		X	10.18	1309+80		X	28.0	MOVE
#2					1309+97	X		45.0	NEW POLE
#1	1311+79.17	X		24.91	1311+42		X	29.0	REPLACE
721 1/3	1313+27.72		X	23.26	S/S		X	28.0	MOVE
721S					1313+28	X		45.0	NEW GUY POLE
722	1314+18.25		X	24.84	S/S		X	28.0	MOVE
723S	1315+12.63	X		49.74					OK
#723	1315+19.22		X	27.60	S/S		X	27.6	REPLACE
#724	1316+32.77		X	31.77	S/S		X	31.8	REPLACE
STUB	1316+34.18		X	25.39					REMOVE

249/725	1317+83.34		X	30.91	S/S		X	30.9	REPLACE
71/726	1318+92.96		X	31.45	S/S		X	30.0	REPLACE
71/1	1319+06.52		X	70.17					OK
#727	1320+48.87		X	27.82	S/S		X	29.0	REPLACE
#728	1321+62.36		X	24.99	S/S		X	27.0	MOVE
#729	1322+76.10		X	20.86	S/S		X	27.0	MOVE
SERVICE	1323+06.16		X	51.19					OK
730	1324+00.99		X	17.97	S/S		X	27.0	MOVE
731	1325+16.51		X	16.86	S/S		X	27.0	MOVE
#732	1326+20.83		X	16.22	S/S		X	27.0	MOVE
#733	1327+64.65		X	16.25	S/S		X	27.0	MOVE
#734	1328+70.13		X	17.73	S/S		X	27.0	MOVE
249/735	1329+81.91		X	19.29	S/S		X	27.0	MOVE
735S					1329+82	X		27.0	NEW GUY POLE
#736	1331+24.89		X	20.25	1331+41		X	37.0	MOVE
#737	1332+30.56		X	21.04	1332+60		X	37.0	MOVE
#738	1333+41.73		X	21.09	1333+38		X	35.0	MOVE
#739	1334+62.74		X	20.53	S/S		X	27.0	MOVE
#739S					1334+63	X		27.0	NEW GUY POLE
249/740	1335+96.59		X	20.52	S/S		X	27.0	MOVE
#741	1336+96.99		X	20.83	1337+02		X	27.0	MOVE
742	1338+25.96		X	21.25	S/S		X	27.0	MOVE
743	1339+35.24		X	21.72	S/S		X	27.0	MOVE
NO #	1339+56.16	X		99.82					OK
784	1339+64.57	X		71.64					OK
#744	1340+79.55		X	23.41	1341+22		X	29.0	MOVE
#744S	1340+98.48	X		27.92	1341-38	X		33.0	MOVE
#249/745	1342+08.57		X	30.44	S/S			29.0	REPLACE
STUB	1342+10.47	X		35.87					OK
#746	1343+15.53		X	30.48	S/S			30.5	REPLACE
#747	1344+19.28		X	30.89	S/S			30.9	REPLACE
#748	1345+32.12		X	30.65	S/S			30.6	REPLACE
NO #	1346+00.25	X		75.75					OK
749	1346+74.32		X	31.42	S/S			31.4	REPLACE
#749	1346+82.27	X		74.31					OK
NO #	1346+90.89	X		30.62	S/S	X		32.0	MOVE
249/750	1347+90.40		X	32.87	S/S		X	32.9	REPLACE
751	1348+90.54		X	31.23	1348+95		X	30.0	REPLACE
751S					1348+95	X		30.0	NEW GUY POLE
752	1350+13.73		X	29.82	S/S		X	35.0	MOVE
753	1350+98.30		X	29.46	S/S		X	35.3	MOVE
753 S	1351+31.74	X		24.96	1350+36	X		30.0	MOVE
754	1352+57.30		X	27.81	S/S		X	28.0	REPLACE
754S					1352+57	X		28.0	NEW GUY POLE
755	1353+80.20		X	27.58	S/S		X	28.0	REPLACE

756	1354+90.00		X	26.46	S/S		X	28.0	MOVE
249/757	1355+90.43		X	26.15	1355+95		X	28.0	MOVE
758	1357+26.34		X	24.93	S/S		X	28.0	MOVE
758S	1357+25.81	X		23.82	S/S	X		26.0	MOVE
NO #	1358+59.34	X		34.26					OK
#759	1358+90.99		X	30.97					OK
#761	1360+33.58		X	32.99					OK
#762	1361+60.52		X	36.11					OK
#26	1362+53.28		X	43.66					OK
#25	1363+95.24		X	57.26					OFF PROJECT
#25S	1364+22.56	X		29.57					OFF PROJECT
<b>New Route 179</b>									
#5S	201+33.48	X		24.66	S/S	X		28.9	MOVE
#3	202+40.92	X		0.76	S/S	X		21.0	MOVE
#4	203+53.03	X		13.30	S/S	X		27.1	MOVE
249C/5	205+52.05	X		13.77					OFF PROJECT
#1S	201+33				S/S		X	23.0	GUY POLE
<b>Old Route 179</b>									
249C/2	81+14.52		X	16.39	81+40		X	23.00	RELOCATE
249C/1	83+47.29	X		23.05					OK
SERVICE	83+70.59	X		87.40					OK
<b>Old Mill Road</b>									
2	71+85.03		X	13.82					OK
1	70+62.49	X		13.39					OFF PROJECT
<b>Shore Road</b>									
#1	100+32.26		X	16.73					OK
2	99+03.20		X	14.28					OFF PROJECT
<b>Lakes Lane</b>									
1S	31+17.19		X	58.29					OK
1	31+39.55	X		15.89	31+39	X		23.0	MOVE
	32+61.09	X		14.68					
<b>Forest Avenue</b>									
#1/2					60+58		X	26.0	NEW POLE

**UNDERGROUND****City of Ellsworth**

City of Ellsworth has traffic signal loops within the limits of this project at the Ellsworth High School Entrance. The traffic signal loops currently control the traffic signals and will be abandoned once pavement removal occurs. The contractor shall provide 2 weeks notification to the prior to pavement removal to allow time for temporary traffic signal arrangements to be made.

**Ellsworth Sewer Department**

Ellsworth Sewer Department has sewer mains within the limits of the project. The Sewer Department intends to replace and relocate sections of their sewer main. The Sewer Department has entered into an Agreement with the Maine Department of Transportation to include the sewer main replacement work in the Department's contract. The Contractor shall perform the sewer work as part of the contract and shall include the sewer work in the schedule for construction. The work shall be completed in accordance with the plans and special provisions for the sewer work included in the contract documents and shall be completed in a manner that the system remains fully functional at all times. The Sewer Department requires 2 weeks notification prior to work taking place to schedule their on-site representative for inspection purposes. If a suspension of sewer work occurs the Sewer Department requires 2 weeks notification prior to sewer work starting back up to schedule inspection.

### **Ellsworth Water Department**

Ellsworth Water Department has water mains within the limits of the project. The Water Department intends to replace and relocate sections of their water main. The Water Department has entered into an Agreement with the Maine Department of Transportation to include the water main replacement work in the Department's contract. The Contractor shall perform the water work as part of the contract and shall include the water work in the schedule for construction. The work shall be completed in accordance with the plans and special provisions for the water work included in the contract documents and shall be completed in a manner that the system remains fully functional at all times. The Water Department requires 2 weeks notification prior to work taking place to schedule their on-site representative for inspection purposes. If a suspension of water work occurs the Water Department requires 2 weeks notification prior to water work starting back up to schedule inspection.

**Emera Maine, FairPoint Communications, OTT Communications & University of Maine Systems all have underground facilities located within the project limits. Underground service transfers have been included in the aerial working days estimates. No impacts are anticipated to their facilities.**

### **RAILROAD**

#### **MaineDOT Railroad**

MaineDOT Railroad has a railroad crossing within the limits of the project. The contractor will provide equipment under the appropriate hourly rental items and ballast for the new crossing to be constructed and the rails to be adjusted up to the new road crossing. Work will need to be completed to allow the roadway to be open to two way traffic at the end of each work day. Once the rail seal gasket is installed on the rails at the new road crossing location it will need to be secured with pavement before traffic will be allowed to pass over the crossing. **It is the contractor's responsibility to coordinate and schedule their work with the Railroad.** The Contractor may work within the railroad right-of-way (25 feet from the tracks) with prior authorization by the railroad and when proper rail protection is in place. The Contractor shall provide **two weeks notification to** MaineDOT Railroad to discuss the work and Rail Protection.

### **PLEASE NOTE**

All underground utilities require **3 working days' notice** for any/all excavation or any other subsurface work around any underground facilities to schedule an on-site representative to be present. The contractor shall hand dig around all the underground facilities.

### **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.

**UTILITY SIGNING**

Any utility working within the construction limits of this project shall ensure that the traveling public is adequately protected at all times. All work areas shall be signed, lighted, and traffic flaggers employed as determined by field conditions. All traffic controls shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, as issued by the Federal Highway Administration.

**SPECIAL PROVISION**  
**SECTION 104**  
**GENERAL RIGHTS AND RESPONSIBILITIES**  
(Electronic Payroll Submission)  
(Payment Tracking)

104.3.8.1 Electronic Payroll Submission The prime contractor and all subcontractors and lower-tier subcontractors will submit their certified payrolls electronically on this contract utilizing the Elation System web based reporting. There is no charge to the contracting community for the use of this service. The submission of paper payrolls will not be allowed or accepted. Additional information can be found at <http://www.maine.gov/mdot/contractors/> under the first “Notice”.

104.3.8.2 Payment Tracking The prime contractor and all subcontractors and lower-tier subcontractors will track and confirm the delivery and receipt of all payments through the Elation System

**SPECIAL PROVISION**  
**SECTION 105**  
**CONTROL OF WORK**  
**(Supplemental Liquidated Damages)**

General: Monetary assessments will be made against the Contractor for each ¼ hour there are lane restrictions as specified below.

Definitions of Terms: For this contract the following definitions apply:

- (a) Calendar Day: Any portion of the day on the calendar including Saturdays, Sundays, and holidays, beginning and ending at midnight.
- (b) Hour: Any continuous 60 minute period or portion of a continuous 60 minute period beginning at the point when a lane and/or shoulder is closed or obstructed by the contractor's operation(s).
- (c) 15 Minute Period: Any portion of a 15 minute continuous period.
- (d) Obstruction: When the contractor's operation(s) have resulted in the useable lane width of the travel lane or passing lane to be less than that specified in the plan documents.

This contract includes a supplemental liquidated damage procedure under which the contractor is assessed a charge for each lane closure outside the time periods specified under Special Provision 105. One lane must remain open at **ALL** times. The charge will be assessed for each lane restriction as follows:

One Lane Closed	\$250/0 - 15 Minutes
	\$500/ 16 -30 Minutes
	\$1,000/ 31-45 Minutes
	\$2,500/ 46-60 Minutes

**\* These charges will be accumulative in nature. Example: 0 to 15 minutes, the contractor shall be assessed \$250.00. From 16 minutes to 30 minutes the charges will be \$500.00 + \$250.00 = \$750.00, and so on. Times above 60 minutes shall receive an additional assessment of \$2,500.00 for each portion of a 15 minute time period.**

The applicable charges will be deducted from any monies due the Contractor for work performed. The deduction will be based on the applicable rate for any and all closures whether work is being performed or not. Deductions will be accomplished through progress payments due the Contractor.

The Contractor shall address in their Traffic Control Plan a contingency plan for opening up both lanes of traffic within one hour of being notified by the Resident. This plan shall be fully detailed, and Permission to open up both lanes shall only be granted if work being performed can safely be stopped to allow lanes to be opened to traffic.

SPECIAL PROVISION  
SECTION 105  
GENERAL SCOPE OF WORK  
(LIMITATIONS OF OPERATIONS)

1. Contractor must maintain two way traffic (2 - 11' lanes) between the hours of 6am and 7pm.
2. Night work is allowed from Sunday night thru Thursday night. No work will be allowed from 7pm Friday to 7pm Sunday from June 15<sup>th</sup> to September 15<sup>th</sup>.
3. Any circumstance outside of these time frames, the Contractor shall be charged Supplemental Liquidated Damages as outlined in Special Provision 105 (Supplemental Liquidated Damages).

SPECIAL PROVISION  
SECTION 105  
General Scope of Work  
(Environmental Requirements)

In-Water work consists of any activity conducted below the normal high water mark of a river, stream, brook, lake, pond or “Coastal Wetland” areas that are subject to tidal action during the highest tide level for the year which an activity is proposed as identified in the tide tables published by the National Ocean Service. <http://www.oceanservice.noaa.gov/> For the full definition of “Coastal Wetlands”, please refer to 38 MRSA 480-B(2)

I. In-Water Work shall not be allowed between the dates of October 1 and July 14.  
**(In-Water work is allowed from July 15 to September 30)**

II. In-Water work window applies to the following water body at the following location:  
1. Davis Brook at Sta. ~1332+10 44.557391 x -68.433948

III. Special Conditions:

1. Special conditions of the Army Corps of Engineers (ACOE) Category II permit (#NAE-2016-199) apply (see permit and conditions in contract documents).

IV. Approvals:

1. Temporary Soil Erosion and Water Pollution Control Plan  
2. Permitted Resource Impacts, see ACOE permit #NAE-2016-199 for locations:

*Wetland:*

*Permanent = 4,618 s.f.*

*Temporary = 707 s.f.*

*Stream:*

*Permanent = 225 s.f.*

*Temporary = 410 s.f.*

V. All activities are prohibited (including placement and removal of cofferdams unless otherwise permitted by Regulatory Agencies) below the normal high water mark if outside the prescribed in-water work window, except for the following:

1. Work within a cofferdam constructed according to MaineDOT’s Standard Specifications and in adherence with the contractors approved “Soil Erosion and Water Pollution Control Plan”.

VI. No work is allowed that completely blocks a river, stream, or brook without providing downstream flow.

NOTE: Regulatory Review and Approval is required to modify the existing In-Water work window. Requests for work window extensions must be submitted to the MaineDOT Environmental Office. Approval of request for work window extensions is not guaranteed and may result in delays in construction schedule that are the sole responsibility of the contractor.

**SPECIAL PROVISION  
SECTION 105.9  
HISTORIC RESOURCES**

Standard Specification 105.9 of the State of Maine Standard Specifications (Revision of November 2014) is deleted and replaced by this Special Provision.

The MaineDOT has conducted consultation in accordance with Section 106 of the National Historic Preservation Act (16 U.S.C. 470f), the Regulation (36 CFR Part 800), and the 2004 Section 106 Maine Programmatic Agreement.

The following requirements are project specific:

- *The glacial bedrock outcrops on the property at Stations 1315+00-1315+65 right and 1317+45-1317+69 right is National Register Listed. No impacts are to be made to the glacial bedrock outcrop. The undertaking depicted on the contract plans was determined to have no adverse effect on the historic integrity of the property. Any deviations from plans in the vicinity of this property must be reviewed by the Project Manager and Historic Coordinator prior to approval of change.*

The following requirements are general requirements for all projects:

- *Changes to the project during construction must be approved by the Project Manager. These changes could have adverse effects to Historic Resources, as well as jeopardize federal funding.*
- *If the Contractor or any subcontractor discovers any object of potential historic archaeological or other historic interest, all work that could disturb the object will immediately cease and will not resume until investigation of the object and related deposits have been completed, and if necessary recovered. The Contractor will notify the MaineDOT immediately. (The first indications of deposits may be burial grounds or campsites of Native Americans that reveal the bones of the dead and implements. Also the exposure of marine fossils or shells found mainly in clay deposits, as well as, exposure of dumps in landfill areas, abandoned campfire sites, and building foundations.)*
- *Any delay of the Contractor's operations resulting from the above will be analyzed in accordance with MaineDOT Standard Specification Section 109.5 – Adjustment for Delay, except that in no event will such delay be a compensable delay.*
- *The Contractor is notified of a Maine Statute, 27 MRSA §371, which states that artifacts, specimens, and material, which are public property by virtue of having been found on, in, or beneath State controlled lands, and places ownership of the same in the State of Maine.*

**SPECIAL PROVISION 105**  
**GENERAL SCOPE OF WORK**  
Equal Opportunity and Civil Rights  
(Disadvantaged Business Enterprises Program)

105.10.1.1 Disadvantaged Business Enterprises Program The Maine Department of Transportation (MaineDOT) has established a Disadvantaged Business Enterprise (DBE) program in accordance with regulations of the United States Department of Transportation (USDOT), 49 CFR Part 26. The MaineDOT receives federal financial assistance from USDOT, and as a condition of receiving this assistance, the Department has signed an assurance that it will comply with 49 CFR Part 26. The MaineDOT is responsible for determining the eligibility of and certifying DBE firms in Maine.

A DBE is defined as a for-profit business that is owned and controlled by one or more socially and economically disadvantaged person(s). For the purpose of this definition:

1. “Socially and economically disadvantaged person” means an individual who is a citizen or lawful permanent resident of the United States and who is Black, Hispanic, Native American, Asian, Female; or a member of another group or an individual found to be disadvantaged by the Small Business Administration pursuant to Section 3 of the Small Business Act.
2. “Owned and controlled” means a business which is:
  - a. A sole proprietorship legitimately owned and controlled by an individual who is a disadvantaged person.
  - b. A partnership or limited liability company in which at least 51% of the beneficial ownership interests legitimately are held by a disadvantaged person(s).
  - c. A corporation or other entity in which at least 51% of the voting interest and 51% of the beneficial ownership interests legitimately are held by a disadvantaged person(s).

The disadvantaged group owner(s) or stockholder(s) must possess control over management, interest in capital, and interest in earnings commensurate with the percentage of ownership. If the disadvantaged group ownership interests are real, substantial and continuing and not created solely to meet the requirements of this program, a firm is considered a bona fide DBE.

105.10.1.2 Commercially Useful Function MaineDOT will count expenditures of a DBE contractor toward DBE goals only if the DBE is performing a commercially useful function on that contract. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. Credit will only be given when the DBE meets all conditions for a CUF. Credit for labor will be in accordance with the responsibilities outlined in the contract. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the Contract, for negotiating price, determining quality and quantity, ordering the materials, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, MaineDOT will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the Contract is commensurate with the work it is actually performing and DBE credit claimed for its performance of the work, and other relevant factors.

Rented equipment used by the DBE must not be rented from the Prime Contractor on a job that the DBE is subcontracted with that Prime Contractor for regular course of business.

A current listing of certified DBEs that may wish to participate in the highway construction program and the scope of work for which they are certified can be found at <http://www.maine.gov/mdot/disadvantaged-business-enterprises/pdf/directory.pdf>. Credit will be given for the value described by a DBE performing as:

- A. A prime contractor; 100% of actual value of work performed by own workforces.
- B. An approved subcontractor; 100% of work performed by own workforces.
- C. An owner-operator of construction equipment; 100% of expenditures committed.
- D. A manufacturer; 100% of expenditures committed. The manufacturer must be a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Contractor. Brokers and packagers shall not be regarded as manufacturers.
- E. A regular dealer; 60% of expenditures committed. A regular dealer is defined as a firm that owns, operates, or maintains a store, warehouse or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public. For purposes of this provision a "Broker" is a DBE that has entered into a legally binding relationship to provide goods or services delivered or performed by a third party. Brokers and packagers shall not be regarded as regular dealers.
- F. A bona fide service provider; 100% of reasonable fees or commissions. Eligible services include professional, technical, consultant, or managerial, services and assistance in the procurement of essential personnel, facilities, equipment, materials or supplies required for the performance of the contract. Eligible services also include agencies providing bonding and insurance specifically required for the performance of the contract.
- G. A trucking, hauling or delivery operation. 100% of expenditures committed when trucks are owned, operated, licensed and insured by the DBE and used on the contract and, if applicable, includes the cost of the self supplied materials and supplies. 100% of expenditures committed when the DBE leases trucks from another DBE firm including an owner-operator. 100% of reasonable fees or commissions the DBE receives as a result of a lease arrangement for trucks from a non-DBE, including an owner-operator.
- H. Any combination of the above.

105.10.1.3 Race-neutral Goals The Maine DOT is required to set an annual goal (approved on a three year basis) for DBE participation in Federal-aid projects. In order to fulfill that goal, bidders are encouraged to utilize DBE businesses certified by the MaineDOT. MaineDOT seeks to meet the established DBE goal solely through race-neutral means. *Race-neutral* DBE participation occurs when a DBE is awarded a prime contract through customary competitive procurement procedures, is awarded a subcontract on a contract that does not carry a DBE contract goal, or wins a subcontract from a prime contractor that did not consider its DBE status in making the award. A DBE/subcontractor Utilization Proposed Form is required to be included in bid documents.

MaineDOT will analyze each project and create a Project Availability Target (PAT), based on a number of factors including project scope, available DBE firms, firms certified in particular project work, etc. Each bid will request that the contractor attempt to meet the PAT. This PAT is developed to assist contractors to better understand what the MaineDOT expectations are for a

specific project. The PAT is NOT a mandate but an assessment of what this particular project can bear for DBE participation. The Department anticipates that each contractor will make the best effort to reach or exceed this PAT for the project.

105.10.1.4 Race-conscious Project Goals If it is determined by the Department that the annual DBE goal will not be met through *race-neutral* means, the Department may implement *race-conscious contract goals* on some projects. Race-conscious contract goals are goals that are enforceable by the Department and require that the prime contractor use good faith effort to achieve the goal set by the Department for that particular project. If race conscious means are implemented on a project, the Prime must comply with the requirements of 49 CFR.

At the time of the bid opening, all Bidders shall submit with their bid a Disadvantaged Business Enterprise (DBE) Commitment Form provided by the Department. This form will list the DBE and non-DBE firms that are proposed to be used during the execution of the Work. The list shall show the name of the firm, the item/material/type of work involved and the dollar amount of work to be performed. The dollar total of each commitment shall be totaled and a percentage determined.

If the project goal is not met, acceptable documentation showing all good faith efforts made to obtain participation may be required in order to award the project. Failure to provide the required listing with the dollar participation total or acceptable documentation of good faith efforts to obtain DBE participation within 3 days after the bid opening date will be considered a lack of responsiveness on the part of the low bidder. Rejection of the low bid under these circumstances will require the low bidder to surrender the Proposal Guaranty to the Department. The submission and approval of the above forms does not constitute a formal subcontract.

If for any reason during the progress of the Work the Contractor finds that DBEs included on the list are unable to perform the proposed work, the Contractor, with written release by the committed DBE or approval of the Department, may substitute other DBE firms for those named on the list. If the Contractor is able to clearly document their inability to find qualified substitute firms to meet the project goal, the Contractor may request in writing approval to substitute the DBE with a non-DBE firm. If at any time during the life of the Contract it is determined that the Contractor is not fulfilling the goal or commitment(s) and is not making a good faith effort to fulfill the DBE requirement, the Department may withhold progress payments. If good faith effort is determined by the Department, failure to meet the DBE contract goal will not be a detriment to the bid award. Fulfillment of the goal percentage shall be determined by dividing the dollars committed to the DBEs by the actual contract dollars. These requirements are in addition to all other Equal Employment Opportunity requirements on Federal-aid contracts.

105.10.1.5 Certification of DBE attainment on Contracts The MaineDOT must certify that it has conducted post-award monitoring of all contracts to ensure that DBEs had done the work for which credit was claimed. The certification is for the purpose of ensuring accountability for monitoring which the regulation already requires. The MaineDOT will certify these contracts through review of CUF forms, Elations sub-contract payment tracking as well as occasional on-site reviews of projects and through the project's final closeout documentation provided by our Contracts Section.

105.10.1.6 Bidders' List Survey Pursuant to 49 CFR 26.11 the MaineDOT is required to “create and maintain” a bidders list and gather bidder information on our construction/consultant projects, Contractors will maintain information on all subcontract bids submitted by DBE and Non-DBE firms and provide that information to the Department. The Following information is required:

Firm Name

Firm Address

Firm status (DBE or non-DBE)

Age of firm (years)

And the annual gross receipts amount as indicated by defined brackets, i.e. \$500,000 to \$800,000, rather than requesting exact figures.

Not only is this information critical in determining the availability of DBE businesses relative to other businesses that do similar work, but the Federal Highway Administration requires that we obtain this information.

MaineDOT DBE Project Attainment Target (PAT)  
for this Project is 5 %

The MaineDOT seeks to meet the specified annual Disadvantaged Business Enterprise (DBE) usage goal set out by 49 CFR 26.45 through the efforts of contractors seeking to employ qualified DBE subcontractors. We seek to meet this goal by race neutral means and do not, at this time, use contract specific requirements for each project. We do however, understand the capacity of Maine's DBE community and the unique characteristics a project may have that would differ from the broad annual goal.

Taking this into consideration, the MaineDOT will review each project and develop an anticipated attainment or Project Attainment Target (PAT) based on several factors that are project specific. Those factors include:

- Scope of Work
- DBE availability according to Specification Item
- Geographic location
- DBE capacity

This PAT is developed to assist contractors to better understand the DBE participation that the MaineDOT can reasonably expect for a specific project. The PAT is NOT a mandate but an assessment of the DBE opportunities that this project could meet or exceed. MaineDOT anticipates that each contractor will make the best effort to reach or exceed the PAT for this project.

**SPECIAL PROVISION 105**  
**CONSTRUCTION AREA**

A Construction Area located in the **City of Ellsworth** has been established by the Maine Department of Transportation (MDOT) in accordance with provisions of 29-A § 2382 Maine Revised Statutes Annotated (MRSA).

- (a) (US.Rte.1A) The section of highway under construction beginning at Sta. 1294+00.00 and ending at Sta. 1358+50.00 of the construction centerline plus approaches.

Per 29-A § 2382 (7) MRSA, the MDOT may “*issue permits for stated periods of time for loads and equipment employed on public way construction projects, United States Government projects or construction of private ways, when within construction areas established by the Department of Transportation. The permit:*

- A. Must be procured from the municipal officers for a construction area within that municipality;*
- B. May require the contractor to be responsible for damage to ways used in the construction areas and may provide for:*
- (1) Withholding by the agency contracting the work of final payment under contract; or*
- (2) The furnishing of a bond by the contractor to guarantee suitable repair or payment of damages.*
- The suitability of repairs or the amount of damage is to be determined by the Department of Transportation on state-maintained ways and bridges, otherwise by the municipal officers;*
- C. May be granted by the Department of Transportation or by the state engineer in charge of the construction contract; and*
- D. For construction areas, carries no fee and does not come within the scope of this section.”*

The Municipal Officers for the **City of Ellsworth** agreed that an Overlimit Permit will be issued to the Contractor for the purpose of using loads and equipment on municipal ways in excess of the limits as specified in 29-A MRSA, on the municipal ways as described in the “Construction Area”.

As noted above, a bond may be required by the municipality, the exact amount of said bond to be determined prior to use of any municipal way. The MDOT will assist in determining the bond amount if requested by the municipality.

The maximum speed limits for trucks on any town way will be 25 mph (40 km per hour) unless a higher legal limit is specifically agreed upon in writing by the Municipal Officers concerned.

**SPECIAL PROVISION 105**  
**OVERLIMIT PERMITS**

**Title 29-A § 2382 MRSA Overlimit Movement Permits.**

**1. Overlimit movement permits issued by State.** The Secretary of State, acting under guidelines and advice of the Commissioner of Transportation, may grant permits to move nondivisible objects having a length, width, height or weight greater than specified in this Title over a way or bridge maintained by the Department of Transportation

**2. Permit fee.** The Secretary of State, with the advice of the Commissioner of Transportation, may set the fee for single trip permits, at not less than \$6, nor more than \$30, based on weight, height, length and width. The Secretary of State may, by rule, implement fees that have been set by the Commissioner of Transportation for multiple trip, long-term overweight movement permits. Rules established pursuant to this section are routine technical rules pursuant to Title 5, chapter 375, subchapter II-A.

**3. County and municipal permits.** A county commissioner or municipal officer may grant a permit, for a reasonable fee, for travel over a way or bridge maintained by that county or municipality

**4. Permits for weight.** A vehicle granted a permit for excess weight must first be registered for the maximum gross vehicle weight allowed for that vehicle.

**5. Special mobile equipment.** The Secretary of State may grant a permit, for no more than one year, to move pneumatic-tire equipment under its own power, including Class A and Class B special mobile equipment, over ways and bridges maintained by the Department of Transportation. The fee for that permit is \$15 for each 30-day period.

**6. Scope of permit.** A permit is limited to the particular vehicle or object to be moved, the trailer or semitrailer hauling the overlimit object and particular ways and bridges.

**7. Construction permits.** A permit for a stated period of time may be issued for loads and equipment employed on public way construction projects, United States Government projects or construction of private ways, when within construction areas established by the Department of Transportation. The permit:

A. Must be procured from the municipal officers for a construction area within that municipality;

B. May require the contractor to be responsible for damage to ways used in the construction areas and may provide for:

(1) Withholding by the agency contracting the work of final payment under contract; or

(2) The furnishing of a bond by the contractor to guarantee suitable repair or payment of damages.

The suitability of repairs or the amount of damage is to be determined by the Department of Transportation on state-maintained ways and bridges, otherwise by the municipal officers;

C. May be granted by the Department of Transportation or by the state engineer in charge of the construction contract; and

D. For construction areas, carries no fee and does not come within the scope of this section.

**8. Gross vehicle weight permits.** The following may grant permits to operate a vehicle having a gross vehicle weight exceeding the prescribed limit:

A. The Secretary of State, with the consent of the Department of Transportation, for state and state aid highways and bridges within city or compact village limits;

B. Municipal officers, for all other ways and bridges within that city and compact village limits; and

C. The county commissioners, for county roads and bridges located in unorganized territory.

**9. Pilot vehicles.** The following restrictions apply to pilot vehicles.

A. Pilot vehicles required by a permit must be equipped with warning lights and signs as required by the Secretary of State with the advice of the Department of Transportation.

B. Warning lights may be operated and lettering on the signs may be visible on a pilot vehicle only while it is escorting a vehicle with a permit on a public way.

With the advice of the Commissioner of Transportation and the Chief of the State Police, the Secretary of State shall establish rules for the operation of pilot vehicles.

**9-A. Police escort.** A person may not operate a single vehicle or a combination of vehicles of 125 feet or more in length or 16 feet or more in width on a public way unless the vehicle or combination of vehicles is accompanied by a police escort. The Secretary of State, with the advice of the Commissioner of Transportation, may require a police escort for vehicles of lesser dimensions.

A. The Bureau of State Police shall establish a fee for state police escorts to defray the costs of providing a police escort. A county sheriff or municipal police department may establish a fee to defray the costs of providing police escorts.

B. The Bureau of State Police shall provide a police escort if a request is made by a permittee. A county sheriff or municipal police department may refuse a permittee's request for a police escort.

C. A vehicle or combination of vehicles for which a police escort is required must be accompanied by a state police escort when operating on the interstate highway system.

**10. Taxes paid.** A permit for a mobile home may not be granted unless the applicant provides reasonable assurance that all property taxes, sewage disposal charges and drain and sewer assessments applicable to the mobile home, including those for the current tax year, have been paid or that the mobile home is exempt from those taxes. A municipality may waive the requirement that those taxes be paid before the issuance of a permit if the mobile home is to be moved from one location in the municipality to another location in the same municipality for purposes not related to the sale of the mobile home.

**11. Violation.** A person who moves an object over the public way in violation of this section commits a traffic infraction.

Section History:

PL 1993, Ch. 683, §A2 (NEW).

PL 1993, Ch. 683, §B5 (AFF).

PL 1997, Ch. 144, §1,2 (AMD).

PL 1999, Ch. 117, §2 (AMD).

PL 1999, Ch. 125, §1 (AMD).

PL 1999, Ch. 580, §13 (AMD).

PL 2001, Ch. 671, §30 (AMD).

PL 2003, Ch. 166, §13 (AMD).

PL 2003, Ch. 452, §Q73,74 (AMD).

PL 2003, Ch. 452, §X2 (AFF).

**Special Provision**  
**Section 107**  
**Prosecution and Progress**  
**(Contract Time)**

The contractor will be allowed to commence work on this project as long as all applicable plans as required under this contract have been submitted, approved and pre-construction meeting held.

The completion date for this contract is June 17, 2017.

All work schedule changes must be submitted for approval to the Department a minimum of 48 hours prior to the requested change.

Once work begins, it shall be continuous through completion except for approved suspensions.

The contractor shall cease all operations and have all travel lanes open to traffic and the roadway in safe operating condition as directed on the following dates:

May 27, 2016 by noon, and not commence again until May 31, 2016 (Memorial Day.)

July 1, 2016 by noon, and not commence again until July 5, 2016 (4<sup>th</sup> of July.)

September 2, 2016 by noon and not commence again until September 6, 2016 (Labor Day.)

May 26, 2017 by noon, and not commence again until May 30, 2017 (Memorial Day.)

For every weekday not worked once operations commence, the contractor will be charged Supplemental Liquidated Damages per calendar day (excluding days lost to inclement weather) at a rate stated in Section 107.7.2.

**SPECIAL PROVISIONS**  
**SECTION 202**  
**REMOVING STRUCTURES AND OBSTRUCTIONS**  
**(Removing Pavement Surface)**

The November 2014 Revision of the Standard Specifications, Section 202-Removing Structures and Obstructions, subsection 202.061-Removing Pavement Surface, has been removed and replaced in its entirety by the following:

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

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

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

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

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

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

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

1. Be tapered to a zero edge by means of milling a 12:1 transition from the edge of traveled way onto the shoulder before opening the lane to traffic. Tapers shall be removed to form a vertical edge prior to the placement of the new pavement course. No additional payment will be made for tapers, or taper removal.
2. Have an additional 2 feet of pavement shall be removed from the shoulder to eliminate the vertical edge at the edge of travelway before opening the lane to traffic. Payment will be made under the pavement removal item.
3. A pavement layer will be placed to reduce the vertical edge to 2 inch or less before opening the lane to traffic.

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

Any areas of concern, such as de-lamination or pot-holing shall be identified on a continuous basis as milling progresses. Proper corrective action will be determined by the Resident and paid for under the appropriate contract items, and if required, completed prior to opening lane to traffic. Any issues that arise **up to** 7 calendar days after being milled will be the responsibility of the MaineDOT unless otherwise noted in Special Provision Section 105 – Limitations Of Operations. Issues that arise after 7 calendar days will be the responsibility of the Contractor unless otherwise noted in Special Provision Section 105 – Limitations Of Operations.

**SPECIAL PROVISION**  
**SECTION 203.33**  
**Special Fill**  
(In-Culvert Fill - Work)

Description This work shall consist of furnishing, placing and grading special fill and stream channel rock inside a culvert, and within an excavated channel, to create a stable streambed as shown on the plans, as described herein, or as directed by the Resident.

Materials Backfill materials for streambed construction shall meet the following requirements:

- A. Special fill may be manufactured from clean, granular material excavated on-site in accordance with Special Provision Section 203, Excavation and Embankment - Dredge Materials, or natural aggregates and shall be obtained from a source approved by the Resident.

Special fill shall consist of a well-graded mixture of sub-angular to sub-rounded hard durable rock, cobbles, and granular material similar to the native material in the existing streambed. The use of dredge, bank run or screening materials from earth borrow pits is preferred. Material from blasting or crushing operations will not be allowed unless the Resident determines that dredge or pit-run materials are unsuitable or not available.

The material shall meet the grading requirements of the following table:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves
12 inch	100
6 inch	50 – 70
3 inch	35 – 50
1 inch	20 – 35
1/2 inch	10 – 25
No. 4	5 – 17
No. 200	0 – 3

The material will be tested for reasonably close conformance with the specified gradation before delivery to the project or during manufacture and placement into temporary stockpile. Any deviation shall be pre-approved by qualified MaineDOT Environmental Office staff prior to use.

- B. Stream channel rock shall conform to the requirements of Section 703.28, Heavy Riprap, except that stone for stream channel rock shall be sub-angular to sub-rounded,

similar to the native material in the existing stream, and shall have a maximum dimension of 36 inches. Un-hewn quarry stone or round boulders or cobbles will not be allowed. On-site sources are preferred.

### Construction Requirements

- A. Culvert. Stream channel rock shall be placed laterally across the width of the culvert, to form rock bands at the designated spacing shown on the plans or as directed by the Resident. One group of two to three rocks shall be placed between each rock band. Stream channel rock shall be bedded on a firm lift of backfill to avoid damaging the culvert. Culvert that is damaged shall be repaired or replaced as directed by the Resident at no additional cost to the Department.

The crest of each rock band shall be roughly V-shaped, with individual rocks extending above the average streambed surface. Stream channel rock protruding above the surface more than the limits shown on the plans shall be embedded, reoriented, or replaced.

Special fill shall be well mixed and placed in a manner that minimizes segregation. Stream channel rock shall be firmly embedded in the special fill with all voids chinked.

The Contractor shall construct a shallow, roughly V-shaped low-flow channel in the surface of the special fill. Minimal hand shaping of special fill may be required. The low point of the channel may vary laterally across the width of the culvert, but shall remain at least 2 feet away from the culvert walls.

After placing and shaping, the special fill shall be thoroughly wetted prior to exposure to normal flow conditions. Any remaining voids shall be filled by washing-in additional special fill or Granular Borrow meeting the specifications for Material for Underwater Backfill, Section 703.19, until the surface is sealed. After washing-in, the special fill depth shall meet the average thickness shown on the plans.

- B. Inlet/Outlet Riprap Pads. The Contractor shall cover and fill void spaces within the in-stream portion of the riprap pads using the methods and materials to infill and seal the special fill.
- C. Stream Channel Reconstruction. The existing channel from the culvert inlet to the upstream tie point shall be excavated and re-graded to form a single channel with a series of rock bands and shallow pools as designated by the Resident. The channel shall be excavated below the proposed profile line to allow placement of special fill to the specified depth. Excessively large rock within the limits of the re-graded channel shall be relocated, or removed and discarded.

Stream channel rock shall be placed and embedded as needed to construct the required number of rock bands. Special fill, with an average thickness of 1 foot, shall be placed and shaped to bring the channel to the specified profile and cross-section.

The existing rock band downstream of the outlet shall be reconstructed to the elevation shown on the plans or as directed, using special fill or stream channel rock to maintain stable grade control.

Method of Measurement

Special fill and stream channel rock will be measured in place by the cubic yard.

Excavation and regrading of the existing stream channel upstream of the culvert will be measured by the cubic yard.

Basis of Payment

The accepted quantities of special fill and stream channel rock will be paid for at the respective contract price per cubic yard complete in place. Payment shall be full compensation for furnishing all materials, equipment and labor including washing-in with water and temporary site access.

Costs to excavate and regrade the existing stream channel will be paid for under Item 203.20, Common Excavation.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
203.33	Special Fill	Cubic Yard
610.210	Stream Channel Rock	Cubic Yard

SPECIAL PROVISION  
SECTION 203  
EXCAVATION AND EMBANKMENT  
(Dredge Materials)

**Management and Disposal:** Dredge Material (See MaineDOT Standard Specifications § 101.2) is regulated as a Special Waste.

In accordance with CMR 418, one hundred cubic yards or less of Dredge Material Beneficially Used in the area(s) adjacent to and draining into the dredged water body is exempt from Beneficial Use Permits. Work associated with the Ellsworth Route 1A Highway Reconstruction initiative will require the excavation of select Dredge Material from the installation of a box culvert located at roughly MaineDOT station 11+17.78 to roughly MaineDOT station 12+07 right and left of center. It is anticipated that less than 100-cubic yards of Dredge Material will be excavated. There is onsite Beneficial Use for approximately 27 cubic yards of this Dredge Material; the remaining Dredge Material (approximately 12 cubic yards) shall be disposed of at an appropriately licensed facility.

The Contractor shall dispose of Dredge Material from the project that is not Beneficially Used at the site of generation at a facility licensed by the Maine Department of Environmental Protection (MDEP) for the management of Special Waste. The Contractor shall be responsible for making all necessary arrangements for dewatering and proper management of the Dredge Material, including any laboratory testing, in accordance with the facility's license. The Contractor shall provide documentation to the Resident that the Dredge Material was managed as specified. The submitted documentation shall consist of truck manifests, waybills, or such documentation as may be acceptable to the Resident and shall clearly document the management site location and the quantity of Dredge Material.

It is acknowledged that the excavation of Dredge for this work may include some boulders. The MDEP has determined that sound boulders (rock 12-inches or more in diameter), that are free of adhering sediment or other contaminants, shall be deemed to be Inert Fill material and shall not be included in the Dredge Material Quantities.

**Method of Measurement:** Dredge Material will be measured by the cubic yard of material removed. Special Waste properly disposed of will be measured by the ton.

**Basis of Payment:** Payment for the Beneficial Use of Dredge Material will be incidental to the project.

The accepted quantity of Dredge Material properly disposed of, as Special Waste, will be paid for at the contract unit price bid for Disposal/ Treatment of Special Excavation.

Payment shall be full compensation for excavation, dewatering, testing, managing, transporting, disposal or placement, and all associated fees.

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
203.2333	Disposal/ Treatment of Special Excavation	Ton

**SPECIAL PROVISION  
SECTION 203  
EXCAVATION AND EMBANKMENT  
(CONTAMINATED SOIL AND GROUNDWATER MANAGEMENT)**

General. The work under this specification shall be performed in conformance with all the procedures and requirements described herein for the following activities: contaminated soil handling, reuse, temporary stockpiling, transportation, storage and disposal and, contaminated water handling, storage, treatment and disposal. This specification also addresses contaminated soil location, identification, and classification. The intent of this specification is to ensure that any contaminated soil and/or water encountered during construction will be managed in a manner that protects worker health and safety, public welfare and the environment.

Environmental Site Conditions. The Maine Department of Transportation's Office of Safety and Compliance (MaineDOT's-OSC.) has conducted a series of assessments related to the Ellsworth Main Street (Route 1A) Highway Improvement Project. An initial Phase I Environmental Assessment for the project area was completed to obtain a general understanding of the environmental conditions along the project corridor. Data garnered from this assessment was used to design a Modified, Phase II Contamination Assessment for the project. The primary focus of the assessments was to evaluate the type and extent of subsurface contamination along the project corridor. The Phase I Assessment included a review of relevant Maine Department of Environmental Protection's (MaineDEP's) and Environmental Protection Agency's (EPA's) databases and field reconnaissance of the project area. During Phase II, borings were advanced along the project's length for investigative purposes. During the advancement of these borings, two areas with impacted soil were identified. A photo-ionization detector (PID) was used to test soil grab samples from select explorations for volatile organic compound (VOC) concentrations indicative of petroleum products. (See *Identified Areas of Contamination* below). Select samples for laboratory testing were also taken to further aid in evaluating subsurface conditions. The results of these investigations are available for review from the Hydrogeologist at MaineDOT's -OSC and in Augusta (207-624-3004).

Identified Area of Contamination. MaineDOT's-OSC investigation identified two areas of soil contamination associated with the Main Road (Route 1A) Highway Improvement Project. For reference, these areas are designated as "Area A" and "Area

**B''**. The location of **Area A** is defined as being in the vicinity of the Irving retail gasoline station roughly between MaineDOT survey stations 1300+00 to 1311+25, right of centerline along Main Street (Route 1A). Within **Area A**, poly-bag field samples screened with a photo-ionization detector (PID) were below detection limit (BDL) to 518 parts per million (PPM) <sup>gasoline equivalent</sup>. Laboratory results for the following: Extractable Petroleum Hydrocarbons (EPH); C9-C18 Aromatic hydrocarbons at 19.7 parts per million (ppm), Phenanthrene at 0.416 ppm and Naphthalene at 0.382 ppm. For Volatile Petroleum Hydrocarbons (VPH); C5-C8 Aliphatic Hydrocarbons at 681 ppm, C9-C12 Aliphatic Hydrocarbons at 90 ppm, C9-C10 Aromatic Hydrocarbons at 170 ppm, Ethylbenzene at 4.33 ppm, M,p-Xylenes at 20.6 ppm, O-Xylene at 4.54 ppm, and Naphthalene at 3.44 ppm. Laboratory results for the following VOCs were detected; 4-Isopropyltoluene at 538 parts per billion (ppb), Ethylbenzene at 3360 ppb, Isopropylbenzene at 996 ppb, m,p-Xylenes at 11800 ppb, Naphthalene at 2070 ppb, n-Butylbenzene at 1070 ppb, n-Propylbenzene at 2740 ppb, o-Xylene at 3060 ppb, sec-Butylbenzene at 446 ppb, 1,2,4-Trimethylbenzene at 15900 ppb, and 1,3,5-Trimethylbenzene at 6200 ppb. Total lead was 5.4 ppm. TCLP Lead was <0.05 ppm. TCLP Benzene was <5.0 ppb. These concentrations define the soils as potential special waste per State remedial guidelines. Soil contamination in **Area A** appears to be related to the past use and storage of gasoline.

The location of **Area B** is in the vicinity of a former retail gasoline station located roughly between MaineDOT stations 1311+25 to 1312+00 right of centerline. Within **Area B**, poly-bag field sample screened with a PID was 10 ppm. Laboratory results for the following: Extractable Petroleum Hydrocarbons (EPH); C19-C36 Aliphatic Hydrocarbons at 11.7 ppm, C11-C22 Aromatic Hydrocarbons at 20.1 ppm, Phenanthrene at 1.06 ppm, Fluoranthene at 0.566 ppm and Pyrene at 0.655 ppm. For Volatile Petroleum Hydrocarbons (VPH); C5-C8 Aliphatic Hydrocarbons at 60.1 ppm, C9-C12 Aliphatic Hydrocarbons at 10.5 ppm, C9-C10 Aromatic Hydrocarbons at 22.5 ppm, Benzene at 0.156 ppm, Ethylbenzene at 0.452 ppm, M,p-Xylenes at 2.22 ppm, O-Xylene at 0.626 ppm, and Naphthalene at 1.47 ppm. The laboratory results indicate the following VOCs were detected 4-Isopropyltoluene at 199 ppb, Ethylbenzene at 1020 ppb, Isopropylbenzene at 303 ppb, m,p-Xylenes at 3470 ppb, Naphthalene at 1510 ppb, n-Butylbenzene at 379 ppb, n-Propylbenzene at 870 ppb, o-Xylene at 929 ppb, sec-Butylbenzene at 158 ppb, 1,2,4-Trimethylbenzene at 5440ppb, and 1,3,5-Trimethylbenzene at 2060 ppb. Total lead was 5.9 ppm. TCLP Lead was <0.05 ppm. TCLP Benzene was <5.0 ppb. These concentrations define the soils as potential special waste per State remedial guidelines. Soil contamination in **Area B** appears to be related to the past use and storage of gasoline.

Identifying and Screening Contaminated Soil and Groundwater. Within the contaminated sections designated **Area A** and **Area B**, excavated soils will be classified by the Resident (or a MaineDOT-OSC representative) based on photo-ionization detector (PID) field screening measurements.

The excavated soils shall be classified as Group 1, Group 2 or Group 3.

Group 1 soils shall have PID field screening measurements indicating relative concentrations of volatile organic compounds (VOCs) less than or equal to 20 parts per million (ppm) as measured in the soil headspace.

Group 2 soils shall have PID field screening measurements indicating VOC concentrations in ppm greater than 20 ppm and less than the value indicated in Table 1 of SOP-TS004 when screened in accordance with the “Outdoor Commercial Worker/Excavation-Construction Worker” clean-up scenario. Field screening will also be done using an oleophilic dye test.

Group 3 soils shall exceed the threshold limit stated in the TS004 Compendium of Field Testing of soil samples exceeding “Outdoor Commercial Worker/Excavation-Construction Worker” clean-up scenario or has a saturated result using the oleophilic dye test.

Handling and Disposition of Soil Materials. Within **Area A and Area B** soil material excavated during construction shall be handled as follows:

Group 1 soils are not considered contaminated. Thus, special handling and disposal are not required for Group 1 soils.

Group 2 soils shall be placed back into their excavation section of origin. The Contractor shall make every attempt to side cast any Group 2 soils next to their excavation site. Upon completion of the given constructional feature, the Group 2 soils shall be placed back into the excavation. Group 2 materials not handled in this manner shall be considered Surplus Group 2 soils. Surplus Group 2 soils must be disposed of or treated at a facility licensed by the MDEP to accept petroleum contaminated special waste. The Contractor is solely responsible for obtaining the associated permits and approvals for the disposal or treatment of the Surplus Group 2 soils from all relevant Municipal, State, and Federal agencies at no additional cost to the State. Notification shall be given to the Resident once approval is granted for the acceptance of this material at the off site facility. No removal of Surplus Group 2 soils from the project shall occur without prior approval by the Resident. If any Surplus Group 2 soils cannot be transported to the pre-approved, properly licensed facility within 8 hours of their excavation, they must be placed in a Temporary Secure Stockpile Area somewhere within the project limits (See Temporary Secured Stockpile Area below).

Group 3 soils shall not be excavated without prior approval by the Resident. The Contractor shall arrange and undertake disposal of all Group 3 soils at a landfill or treatment facility licensed to accept petroleum contaminated special waste. The Contractor is responsible for all additional testing required by the receiving facility. Group 3 soils that cannot be disposed of within 8 hours of excavation

shall be stored in a Temporary Secured Stockpile area. If the Contractor proposes other disposal or treatment options, the Contractor is solely responsible for obtaining the associated permits and approvals from all relevant Municipal, State, and Federal agencies at no additional cost to the State.

The Resident is responsible for signing any manifests or bills of lading required to transport and dispose of contaminated soil. The Resident will send all manifests and bills of lading to MaineDOT-OSC, Station 16, Augusta, Maine 04333.

Trench and Underdrain/Stormdrain Design in Contaminated Sections. In **Area A** and **Area B**, solid, Option III, non-perforated pipe shall be used instead of perforated underdrain pipe to help prevent the infiltration and transportation of potentially contaminated groundwater within the underdrain/stormdrain system. The Contractor shall backfill around the pipe and trenches in this section with uncontaminated material. Backfilling of the trench shall be in accordance with Section 206.03. All stones larger than 3 inches, frozen lumps, dry chunks of clay or any other objectionable matter shall be removed before backfilling.

Seepage control dikes (SCD) shall be installed roughly every 60 feet along the stormwater pipe trench

The SCDs shall consist of a mineral clay material with a liquid limit of equal to or greater than 24 and a natural moisture content of at least 20 percent. The clay should be placed in dry excavations in 6 inch maximum, thick lifts and compacted to 90% of the maximum dry unit weight as determined by AASHTO T99 (Standard Proctor). The SCDs shall be 5 feet long, be in intimate contact with the trench floor, trench walls and circumference of the pipe and extend up to the bottom of the road base. The excavated existing road base or similar material may be placed on top of the SCDs. The Contractor shall take care to ensure that no voids or uncompacted soil is left beside or beneath the Option III culvert pipe.

Secured Stockpile Area. Direct transport of Surplus Group 2 or Group 3 soils to a pre-approved management facility is recommended. However, should the Contractor temporarily store any Surplus Group 2 or Group 3 soils at the site for more than 8 hours following excavation, they must be placed into a properly constructed Temporary Secured Stockpile Area. The Temporary Secured Stockpile Area must be constructed as defined herein and must be approved by the Resident prior to its use.

Should the Contractor utilize a Temporary Secured Stockpile Area, they shall install a continuous 0.3 meter high compacted soil berm around the Secured Stockpile. The Secured Stockpile shall be placed on a liner of 20-mil polyethylene and securely covered with 20-mil polyethylene. The polyethylene liner and cover shall be placed over the soil berm and be installed to ensure that precipitation water drains directly to the outside of the berm perimeter while leachate from the contaminated soil is retained within the stockpile. The Secured Stockpile and soil berm shall be enclosed within a perimeter of concrete Jersey barriers or wooden barricades. The area within the Jersey

barriers (or wooden barricades) shall be identified as a "restricted area" to prevent unauthorized access to the contaminated soils.

Secured Stockpile Area - Materials.

A. Polyethylene. Polyethylene used for liner in the Secured Stockpile Area shall have a minimum of 20-mil thickness and shall meet the requirements of ASTM D3020.

B. Common Borrow. Fill used in the construction of the Temporary Secured Stockpile Area soil berm shall consist of Common Borrow and meet the requirements of Section 703.18

C. Concrete Barriers or Wooden Barricades. Concrete barriers or Wooden Barricades to form the sides of the Temporary Secured Stockpile Area shall meet the requirements of Section 526 or 652.05.

Health and Safety/Right-to-Know. Contractors and subcontractors are required to notify their workers of the history of the site and contamination that may be present and to be alert for evidence of contaminated soil and groundwater. The Contractor shall notify the Resident **at least three business days** prior to commencing any excavation in **Areas A and Area B.**

The Contractor shall prepare a site specific Health and Safety Plan (HASP) for its workers and subcontractors who may work in the contaminated areas of the site. A Qualified Health and Safety Professional shall complete the HASP. The Qualified Health and Safety Professional will be an expert in field implementation of the following federal regulations:

29 CFR 1910.120 or 29 CFR 1926.65	Hazardous Waste Operations and Emergency Response
29 CFR 1910.134	Respiratory Protection
29 CFR 1926.650	Subpart D - Excavations
29 CFR 1926.651	General Requirements
29 CFR 1926.652	Requirements for Protective Systems

MaineDOT is voluntarily ameliorating the contamination in **Areas A and Area B.** The remedial efforts defined herein have been reviewed and approved by MaineDEP. Given that this is a voluntary clean up effort approved by a regulatory agency, the OSHA requirements as defined in 29 CFR 1910.120 apply. These requirements mandate that workers and any subcontractors working in the contaminated areas shall comply with all OSHA regulations for Hazardous Waste Operations and Emergency Response including

a 40 hour initial hazardous waste operations certification [OSHA 1910.120(e)], annual 8 hour refresher course within the last 12 months and medical surveillance [OSHA 1910.120(f)] within the last 12 months.

The contractor shall designate a person to provide direct on-site supervision of the work in the contaminated areas. This person shall have the training under OSHA 1910.120 (e) as above and in addition be qualified as a construction Competent Person. It is the responsibility of the competent person to make those inspections necessary to identify situations that could result in hazardous conditions (e.g., possible cave-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions), and then to insure that corrective measures are taken.

Submittals. The Contractor shall submit a site specific Health and Safety Plan (HASP) to the Resident at least two weeks in advance of any excavation work on the project. The Contractor shall not proceed with work until MaineDOT has reviewed the plan and notified the Contractor that it is acceptable.

Health and Safety Monitoring. Within the contaminated areas of the project, the Contractor's designated on-site person shall monitor the worker breathing zone for those constituents specified in the Contractor's HASP. The Contractor shall provide all required health and safety monitoring equipment.

Dewatering. Groundwater may be encountered and its removal necessary to complete work within **Area A** and **Area B**. It will be treated as "contaminated" water. The Contractor shall inform the Resident before any dewatering commences. The "contaminated" water shall be pumped into a temporary holding tank(s). The Contractor will be responsible for the procurement of any holding tank(s). Any testing, treatment and/or disposal of the stored, petroleum-contaminated water shall be undertaken by the Contractor in accordance with applicable Federal, State and local regulatory requirements.

On-Site Water Storage Tanks - Materials. If dewatering within the identified contaminated area becomes necessary the holding tanks used for temporary storage of contaminated water pumped from excavations shall be contamination free and have a minimum capacity of 2,000 gallons.

Dust Control. The Contractor shall employ dust control measures to minimize the creation of airborne dust during the construction process in potentially contaminated areas. As a minimum, standard dust control techniques shall be employed where heavy equipment and the public will be traveling. These may include techniques such as watering-down the site or spreading hygroscopic salts.

Unanticipated Contamination. If the Contractor encounters previously undiscovered contamination or potentially hazardous conditions related to contamination,

the Contractor shall immediately suspend work and secure the area. The Contractor will then notify the Resident immediately. These potentially hazardous conditions include, but are not limited to, buried containers, drums, tanks, "oil saturated soils", strong odors, or the presence of petroleum sufficient to cause a sheen on the groundwater. The area of potential hazard shall be secured to minimize health risks to workers and the public and to prevent a release of contaminants into the environment. The source of any suspected contamination shall be evaluated by the Resident (or MaineDOT's -OSC representative). As appropriate, the Resident will notify the MDEP's Response Services Unit in Bangor and MaineDOT's -OSC. The Ellsworth Fire Department must also be notified prior to removal of buried storage tanks and associated piping. The Contractor will evaluate the impact of the hazard on construction, amend the HASP if necessary, and with the Resident's approval, recommence work in accordance with the procedures of this Special Provision.

Method of Measurement. There will be no measurement for identification and environmental screening of contaminated soil material (this will be done by the Resident or MaineDOT-OSC representative).

Measurement for the development of a Health and Safety Plan (HASP) and providing health and safety equipment and personnel shall be by lump sum.

Measurement of the off site treatment or disposal of Surplus Group 2 and all Group 3 soils will be by the ton of Special Excavation.

There will be no measurement for construction of a Temporary Secured Stockpile Area. Construction of a Temporary Secured Stockpile Area, if necessary, is considered incidental to project construction. There will be no measurement for hauling Surplus Group 2 material or Group 3 soils to the Temporary Secure Stockpile area or placement and removal of Surplus Group 2 or Group 3 soils in or out of the Temporary Secure Stockpile area. All hauling and any subsequent management/placement of contaminated soils are considered incidental to project construction.

There will be no measurement for additional laboratory testing of contaminated soil that is required by the landfill or treatment facility. Testing is incidental to the disposal of Special Excavation.

Measurement for the following items shall be according to Subsection 109:04 ("Change Order"/Force Account): any necessary contaminated water holding tank(s); and treatment or disposal of any contaminated groundwater.

Basis of Payment. There will be no payment for the identification and environmental screening of contaminated soil material (this will be done by the Resident or MaineDOT-OSC representative).

Payment for the development of a Health and Safety Plan (HASP) and providing health and safety equipment and personnel shall be by the lump sum

Payment for off site disposal or treatment of contaminated Surplus Group 2 and all Group 3 soils at a MDEP licensed facility shall be by the ton of Special Excavation.

There will be no payment for the construction of the Temporary Secured Stockpile Area or hauling/management/placement of contaminated soils to the Temporary Secured Stockpile Area. The Temporary Secured Stockpile Area shall be considered incidental to project construction.

Payment for the following items shall be according to Subsection 109:04 (“Change Order”/Force Account): any necessary contaminated water holding tank(s); and treatment or disposal of any contaminated groundwater.

Pay Item		Pay Unit
203.2312	Health and Safety Plan (HASP)	L.S.
203.2333	Disposal/Treatment of Special Excavation	Ton

SPECIAL PROVISION  
DIVISION 400  
 PAVEMENTS

SECTION 401 - HOT MIX ASPHALT PAVEMENT  
 (HMA Hamburg Wheel Tracker Specification with Hydrated Lime Option)

401.03 Composition of Mixtures The Contractor shall compose the Hot Mix Asphalt Pavement with aggregate, Performance Graded Asphalt Binder (PGAB), and mineral filler if required. HMA shall be designed and tested according to AASHTO R35 and the volumetric criteria in Table 1. The Contractor shall size, uniformly grade, and combine the aggregate fractions in proportions that provide a mixture meeting the grading requirements of the Job Mix Formula (JMF).

The Contractor shall submit for Department approval a JMF to the Central Laboratory in Bangor for each mixture to be supplied. The Department may approve 1 active design per nominal maximum size, per traffic level, per plant, plus a 9.5mm “fine” mix for shimming and where required, a non-RAP design for bridge decks. The Department shall then have 14 calendar days in which to process a new design before approval, not including time needed for Hamburg Wheel Tracker verification testing. The JMF shall establish a single percentage of aggregate passing each sieve size within the limits shown in section 703.09. The mixture shall be designed and produced, including all production tolerances, to comply with the allowable control points for the particular type of mixture as outlined in 703.09. The JMF shall state the original source, gradation, and percentage to be used of each portion of the aggregate including RAP when utilized, and mineral filler if required. It shall also state the proposed PGAB content, the name and location of the refiner, the supplier, the source of PGAB submitted for approval, the type of PGAB modification if applicable, and the location of the terminal if applicable.

In addition, the Contractor shall provide the following information with the proposed JMF:

- Properly completed JMF indicating all mix properties (Gmm, VMA, VFB, etc.)
- Stockpile Gradation Summary
- Design Aggregate Structure Consensus Property Summary
- Design Aggregate Structure Trial Blend Gradation Plots (0.45 power chart)
- Trial Blend Test Results for at least three different asphalt contents
- Design Aggregate Structure for at least three trial blends
- Test results for the selected aggregate blend at a minimum of three binder contents
- Specific Gravity and temperature/viscosity charts for the PGAB to be used
- Recommended mixing and compaction temperatures from the PGAB supplier
- Material Safety Data Sheets (MSDS) For PGAB
- Asphalt Content vs. Air Voids trial blend curve
- Test report for Contractor’s Verification sample
- Summary of RAP test results (if used), including count, average and standard deviation of binder content and gradation

At the time of JMF submittal, the Contractor shall identify and make available the stockpiles of all proposed aggregates at the plant site. There must be a minimum of 150 ton for stone stockpiles, 75 ton for sand stockpiles, and 50 ton of blend sand before the Department will sample. The Department shall obtain samples for laboratory testing. The Contractor shall also make available to the Department the PGAB proposed for use in the mix in sufficient quantity to test the properties of the asphalt and to produce samples for testing of the mixture.

Before the start of paving, the Contractor shall provide the Department with eight boxes of plant produced HMA. The Contractor shall test its split of the sample and determine if the results meet the requirements of the

Department’s written policy for mix design verification (See Maine DOT Policies and Procedures for HMA Sampling and Testing available at the Central Laboratory in Bangor). If the results are found to be acceptable, the Contractor will forward their results to the Department’s Lab, which will test the Department’s split of the sample. The results of the two split samples will be compared and shared between the Department and the Contractor. If the HMA meets the requirements for mix design verification, the mixture will be tested for rutting and moisture sensitivity in the Hamburg Wheel Tracker according to AASHTO T324, “Hamburg Wheel-Track Testing of Hot Mix Asphalt (HMA).” The sample will be required to meet the applicable requirements of Table 1A below for approval, depending on the PG binder grade required by the 403 Special Provision. If the Contractor elects to use hydrated lime at a minimum of 1.0% in the HMA mix design according to Special Provision 401 - HMA using Hydrated Lime, the mixture must meet the applicable requirements of Table 1B. If the sample meets the requirements of Table 1A/1B, an approved JMF will be forwarded to the Contractor and paving may commence. The Department will have five business days from receipt of the sample at the Central Laboratory to process, test, and report the Hamburg Wheel Tracker sample. The first day’s production shall be monitored, and the approval may be withdrawn if the mixture exhibits undesirable characteristics such as checking, shoving or displacement.

The Contractor shall be allowed to submit aim changes within 24 hours of receipt of the first Acceptance test result. Should all of the Acceptance samples of a Lot be obtained prior to the receipt of the first Acceptance result, the Department will not allow the aim changes to be applied to that Lot. Adjustments will be allowed of up to 2% on the percent passing the 2.36 mm sieve through the 0.075 mm and 3% on the percent passing the 4.75 mm or larger sieves. Adjustments will be allowed on the %PGAB of up to 0.2%. Adjustments will be allowed on GMM of up to 0.010.

The Contractor shall submit a new JMF for approval each time a change in material source or materials properties is proposed. The same approval process shall be followed. The cold feed percentage of any aggregate may be adjusted up to 10 percentage points from the amount listed on the JMF, however no aggregate listed on the JMF shall be eliminated. The cold feed percentage for RAP may be reduced up to 10 percentage points from the amount listed on the JMF and shall not exceed the percentage of RAP approved in the JMF or for the specific application under any circumstances.

TABLE 1: VOLUMETRIC DESIGN CRITERIA

Design ESAL’s (Millions )	Required Density (Percent of G <sub>mm</sub> )			Voids in the Mineral Aggregate (VMA)(Minimum Percent)					Voids Filled with Binder (VFB) (Minimum %)	Fines/Eff. Binder Ratio
				Nominal Maximum Aggregate Size (mm)						
	N <sub>initial</sub>	N <sub>design</sub>	N <sub>max</sub>	25	19	12.5	9.5	4.75		
<0.3	≤91.5	96.0	≤98.0	13.0	14.0	15.0	16.0	16.0	70-80	0.6-1.2
0.3 to <3	≤90.5								65-80	
3 to <10	≤89.0								65-80*	
10 to <30									≥30	

\*For 9.5 mm nominal maximum aggregate size mixtures, the maximum VFB is 82.

\*For 4.75 mm nominal maximum aggregate size mixtures, the maximum VFB is 84.

TABLE 1A: HAMBURG WHEEL TRACKER REQUIREMENTS

Specified PG Binder Grade	Test Temperature (°C)	Maximum Rut Depth (mm)	Minimum Number of Passes	Minimum Allowable SIP*
PG 64-28	45	12.5	20,000	15,000
PG 64E-28	45	8.0	20,000	15,000

\* As calculated by the most recently published version of the MaineDOT HWT worksheet, which is available online at <http://www.maine.gov/mdot/contractors/publications/>

TABLE 1B: HAMBURG WHEEL TRACKER REQUIREMENTS (WITH HYDRATED LIME)

Specified PG Binder Grade	Test Temperature (°C)	Maximum Rut Depth (mm)	Minimum Number of Passes	Minimum Allowable SIP*
PG 64-28	45	12.5	15,000	10,000
PG 64E-28	45	8.0	15,000	10,000

\* As calculated by the most recently published version of the MaineDOT HWT worksheet, which is available online at <http://www.maine.gov/mdot/contractors/publications/>

401.18 Quality Control Method A, B & C The following language has been added to Section 401.18:

The project specific QCP shall address the sampling, transport, and testing of Hamburg Wheel Tracker QC samples and what potential steps will be taken if QC samples do not meet the requirements in Table 1A. The project-specific QCP shall also contain a sample Hamburg Wheel Tracker test report for approval. The Contractor shall sample and test HMA Pavement in the Hamburg Wheel Tracker according to AASHTO T324 in accordance with the following minimum frequencies:

TABLE 2A: MINIMUM QUALITY CONTROL FREQUENCIES

Test or Action	Frequency	Test Method
Hamburg Wheel Tracker	1 per 4,000 ton and at least once per Acceptance Lot	AASHTO T 324

The Contractor shall sample the HMA on the first day of production and test the sample in the Hamburg Wheel Tracker according to AASHTO T324. This sample will not count towards the minimum quality control frequency specified in Table 2A. The Contractor shall submit all Hamburg Wheel Tracker test reports in writing, signed by the appropriate technician and present them to the Department within ten days of initial sampling, except when otherwise noted in the project specific QCP due to local restrictions. The Contractor shall make the raw Hamburg Wheel Tracker data from QC samples available to the Department upon request. If a QC sample fails to meet the criteria in Table 1A/1B, the Contractor will be required to submit a corrective action letter to the Resident, Materials Engineer, Pavement Quality Manager, and Pavement Quality Engineer by the end of the following working day with the proposed changes to bring the mixture back into compliance. The Department will respond and either accept or reject the Contractor's proposed corrective action by the end of the following working day from when the letter was received.

The Department will sample and test the HMA during production to verify compliance with the Hamburg Wheel Tracker Requirements. If a verification sample fails to meet the criteria in Table 1A/1B, the Contractor will be required to submit a corrective action letter to the Resident, Materials Engineer, Pavement Quality Manager, and Pavement Quality Engineer by the end of the following working day with the proposed changes to bring the mixture back into compliance. The Department will respond and either accept or reject the Contractor's proposed corrective action by the end of the following working day from when the letter was received.

SPECIAL PROVISION  
SECTION 401  
HOT MIX ASPHALT PAVEMENT

401 HOT MIX ASPHALT LONGITUDINAL JOINT DENSITY

401.30 Description The Department will measure the pavement density of longitudinal joints constructed between adjoining travel lanes. Core samples shall be tested according to AASHTO T-166. The Department will randomly determine core locations. The Contractor shall cut 6 in diameter cores at no additional cost to the Department by the end of the working day following the day the pavement is placed, and immediately give them to the Department. The cores will be placed in a transport container provided by the Department and transported by the Contractor to the designated MaineDOT Lab as directed by the Department. Pre-testing of the acceptance cores will not be allowed. At the time of sampling, the Contractor and the Department shall mutually determine if a core is damaged. If it is determined that the core(s) is damaged, the Contractor shall cut new core(s) at the same offset and within 3 ft of the initial sample. At the time the core is cut, the Contractor and the Department will mutually determine if saw cutting of the core is needed, and will mark the core at the point where sawing is needed. The core may be saw cut by the Contractor in the Department's presence onsite, or in a MaineDOT Lab by the Department, without disturbing the layer being tested to remove lower layers of Hot Mix Asphalt Pavement, gravel, or RAP. No recuts are allowed at a test location after the core has been tested.

Cores shall be taken directly over the construction joint. Should the notched wedge joint device be used, the cores shall be cut directly over the center of the taper portion of the wedge (approximately centered 3" from the visible joint).

As part of the project specific QCP, the Contractor shall include details as to methods of construction, rolling and compaction efforts, and action plan to adjust methods or equipment should the Quality level fall below 50 percent within limits. The Contractor shall be required to measure the joint density at randomly selected locations with a minimum frequency of one measurement per 750 linear feet. The Contractor shall have the option to cut calibration/verification cores at a rate not to exceed 1 per day.

If the Quality level for density falls below 50 percent within limits, the Contractor shall make corrective action to the longitudinal joint construction method before proceeding with the Lot, or before starting a new Lot. In cases where the corrective action can be shown to immediately increase density, such as with informational cores or density gauge readings, the Contractor may elect to resume production once the corrective action methods are established. Additional QC testing shall be performed to verify the effectiveness of the corrective action. Should the Quality Level for density remain at or fall below 50 percent within limits, then the Contractor shall be required to make further adjustments to the construction method. The Department will consider corrective action acceptable if the density pay factor increases based on verification samples or acceptance samples.

401.31 Acceptance This method utilizes Quality Level Analysis and pay factor specifications as described in Section 106. For Hot Mix Asphalt Pavement designated for acceptance under Quality Assurance provisions, the Department will sample once per subplot on a statistically random basis, test, and evaluate in accordance with the following Acceptance Criteria:

Lot size will be the entire length of longitudinal joint for the given HMA layer for the project, or equal Lots of a size agreed upon at the Pre-paving conference. The maximum subplot size shall be 1500 linear feet of longitudinal joint for density and the minimum number of sublots for any Lot shall be five. The Lot will be divided up into sublots of equal length. There shall be a separate Lot for each lift of HMA pavement, and Lots shall not be comprised of results from more than one HMA layer.

The Department will determine a pay factor using acceptance limits from Table 1.

TABLE 1: LONGITUDNAL JOINT DENSITY ACCEPTANCE LIMITS

PROPERTY	LSL
% TMD (In-place density)*	91.0

\* The Theoretical Maximum Density will be determined from the average of the Gmm values used to determine the percent compaction of the nearest acceptance cores on either side of the Centerline Joint Core from each adjacent mat.

The Department will calculate the Pay Adjustment for Centerline Joint Density as follows:

Where

$$PA = (\text{joint density PF} - 1.0)(Q)(P) \times 0.40$$

PA = Pay Adjustment  
 Q = Quantity of traveled way pavement represented by PF in tons  
 P = Contract price per ton  
 PF = Pay Factor

If the joint density Pay Factor is less than 0.88, the Pay Adjustment shall be:

$$PA = (-0.05)(Q)(P)$$

**SPECIAL PROVISION**  
**SECTION 401 - HOT MIX ASPHALT PAVEMENT**

The Standard Specification 401 – Hot Mix Asphalt Pavement, has been modified with the following revisions. All sections not revised by this Supplemental Specification shall be as outlined in Section 401 of the Standard Specifications.

401.18 Quality Control Method A, B & C The Contractor shall operate in accordance with the approved Quality Control Plan (QCP) to assure a product meeting the contract requirements. The QCP shall meet the requirements of Section 106.6 - Acceptance and this Section. The Contractor shall not begin paving operations until the Department approves the QCP in writing.

The Contractor shall cease paving operations whenever one of the following occurs on a lot in progress:

- a. Method A: The Pay Factor for VMA, Voids @  $N_d$ , Percent PGAB, composite gradation, VFB, fines to effective binder or density using all Acceptance or all Quality Control tests for the current lot is less than 0.85. No ceasing of paving operations shall be required for fines to effective binder if the mean test value is equal to the LSL or USL and  $s = 0$ .
- b. Method B: The Pay Factor for VMA, Voids @  $N_d$ , Percent PGAB, composite gradation, VFB, fines to effective binder or density using all Acceptance or all Quality Control tests for the current lot is less than 0.90. No ceasing of paving operations shall be required for fines to effective binder if the mean test value is equal to the LSL or USL and  $s = 0$ .
- c. Method C: The Pay Factor for Percent PGAB, percent passing the nominal maximum sieve, percent passing 2.36 mm sieve, percent passing 0.300 mm sieve, percent passing 0.075 mm sieve or density using all Acceptance or all available Quality Control tests for the current lot is less than 0.85. No ceasing of paving operations shall be required for percent passing the nominal maximum sieve, percent passing 2.36 mm sieve, percent passing 0.300 mm sieve, or percent passing 0.075 mm sieve if the mean test value is equal to the LSL or USL and  $s = 0$ .
- d. The Coarse Aggregate Angularity or Fine Aggregate Angularity value falls below the requirements of Table 3: Aggregate Consensus Properties Criteria in Section 703.07 for the design traffic level.
- e. Each of the first 2 control tests for a Method A or B lot fall outside the upper or lower limits for VMA, Voids @  $N_d$ , or Percent PGAB; or under Method C, each of the first 2 control tests for the lot fall outside the upper or lower limits for the nominal maximum, 2.36 mm, 0.300 mm or 0.075 mm sieves, or percent PGAB.
- f. The Flat and Elongated Particles value exceeds 10% by ASTM D4791.
- g. There is any visible damage to the aggregate due to over-densification other than on variable depth shim courses.
- h. The Contractor fails to follow the approved QCP.

401.203 Method C Lot Size will be the entire production per JMF for the project, or if so agreed at the Pre-paving Conference, equal lots of up to 4500 tons, with unanticipated over-runs of up to 1500 ton rolled into the last lot. Sublot sizes shall be 750 ton for mixture properties, 500 ton for base or binder densities and 250 ton for surface densities. The minimum number of sublots for mixture properties shall be 4, and the minimum number of sublots for density shall be five.

TABLE 7: METHOD C ACCEPTANCE LIMITS

Property	USL and LSL
Passing 4.75 mm and larger sieves	Target +/-7%
Passing 2.36 mm to 1.18 mm sieves	Target +/-5%
Passing 0.60 mm	Target +/-4%
Passing 0.30 mm to 0.075 mm sieve	Target +/-2%
PGAB Content	Target +/-0.4%
% TMD (In place density)	95.0% +/- 2.5%

### Pay Adjustment Method C

The Department will use density, Performance Graded Asphalt Binder content, and the percent passing the nominal maximum, 2.36 mm, 0.300 mm and 0.075 mm sieves for the type of HMA represented in the JMF. If the PGAB content falls below 0.80, then the PGAB pay factor shall be 0.55.

Density: For mixes having a density requirement, the Department will determine a pay factor using Table 7: Method C Acceptance Limits:

$$PA = (\text{density PF} - 1.0)(Q)(P) \times 0.50$$

PGAB Content and Gradation The Department will determine a pay factor using Table 7: Method C Acceptance Limits. The Department will calculate the price adjustment for Mixture Properties as follows:

$$PA = (\% \text{ Passing Nom. Max PF} - 1.0)(Q)(P) \times 0.05 + (\% \text{ passing 2.36 mm PF} - 1.0)(Q)(P) \times 0.05 + (\% \text{ passing 0.30 mm PF} - 1.0)(Q)(P) \times 0.05 + (\% \text{ passing 0.075 mm PF} - 1.0)(Q)(P) \times 0.10 + (\text{PGAB PF} - 1.0)(Q)(P) \times 0.25$$

### 401.223 Process for Dispute Resolution (Methods A B & C only)

TABLE 10: DISPUTE RESOLUTION VARIANCE LIMITS

PGAB Content	+/-0.4%
$G_{mb}$	+/-0.030
$G_{mm}$	+/-0.020
Voids @ $N_d$	+/-0.8%
VMA	+/-0.8%
Passing 4.75 mm and larger sieves	+/- 4.0%
Passing 2.36 mm to 0.60 mm sieves	+/- 3.0%
Passing 0.30 mm to 0.15	+/- 2.0 %
0.075 mm sieve	+/- 0.8%

**SPECIAL PROVISION**  
**SECTION 403**  
**HOT MIX ASPHALT**

Desc. Of Course	Grad Design.	Item Number	Total Thick	No. Of Layers	Comp. Notes
<b><u>5" HMA Overlay Areas</u></b>					
<b><u>U.S. Route 1A - Mainline Travelway, Auxiliary Lane, &amp; Shoulders</u></b>					
<b><u>Route 179 – Mainline Travelway &amp; Shoulders</u></b>					
Wearing	12.5 mm	403.2081	1 ½"	1	5,7,20,21,26,28,30
Intermediate	12.5 mm	403.213	1 ½"	1	1,4,7,15,20
Base	12.5 mm	403.213	2"	1	1,4,7,15,20
<b><u>1 ½" Mill &amp; 1 ½" HMA Overlay Areas</u></b>					
<b><u>U.S. Route 1A - Mainline Travelway &amp; Shoulders</u></b>					
Wearing	12.5 mm	403.2081	1 ½"	1	5,7,20,21,26,28,30
<b><u>4" HMA Overlay Areas</u></b>					
<b><u>Side Roads - Mainline Travelway &amp; Shoulders</u></b>					
Wearing	12.5 mm	403.2081	1 ½"	1	5,7,20,26,28,30
Base	12.5 mm	403.213	2 ½"	1	1,4,7
<b><u>2" Mill &amp; 2" HMA Overlay Areas</u></b>					
<b><u>Lakes Lane - Mainline Travelway &amp; Shoulders</u></b>					
Wearing	12.5 mm	403.2081	2"	1	5,7,28,30
<b><u>3" HMA Overlay Areas</u></b>					
<b><u>U.S. Route 1A Shoulders (As Indicated)</u></b>					
Wearing	12.5 mm	403.2081	1 ½"	1	5,7,28,30
Base	12.5 mm	403.213	1 ½"	1	1,4,7
<b><u>Shim – Areas as Directed by the Resident</u></b>					
Shim	9.5 mm	403.211	variable	1/more	1,4,10,11,14
<b><u>Drives, Islands, Misc.</u></b>					
Wearing	9.5 mm	403.209	2" - 3"	2/more	2,3,10,11,14

**COMPLEMENTARY NOTES**

1. The required PGAB for this mixture will meet a **PG 64-28** grading.
2. The incentive/disincentive provisions for density shall not apply. Rollers shall meet the requirements of this special provision. The use of an oscillating steel roller shall be required to compact all mixtures pavements placed on bridge decks.
3. The design traffic level for mix placed shall be <0.3 million ESALS. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **50 gyrations**.
4. The design traffic level for mix placed shall be 0.3 to <3 million ESALS. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **50 gyrations**.
5. The aggregate qualities shall meet the design traffic level of 3 to <10 million ESALS for mix placed under this contract. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **75 gyrations**.

7. Section 106.6 Acceptance, (1) Method A.
10. Section 106.6 Acceptance, (2) Method D.
11. The combined aggregate gradation required for this item shall be classified as a 9.5mm “**fine graded**” mixture, (using the Primary Control Sieve control point) as defined in 703.09.
14. The combined aggregate gradation required for this item shall be classified as a 9.5mm Thin Lift Mixture (TLM) mixture, using the Aggregate Gradation Control Points as defined in 703.09.
15. The base and intermediate layers of HMA (2” of 403.213 & 1 ½” of 403.213) shall be completed before winter suspension. Any intermediate or base HMA placed after the seasonal limitations to meet this requirement shall be considered temporary and removed and replaced the following construction season. The Department will not be responsible for costs or time related to the placement, removal or replacement of temporary pavement.
20. The Contractor may place the specified HMA pavement course, not to exceed 2 inch compacted depth, over the full single travel lane width, for each production day. If this option is utilized the Contractor will be required to place a matching course of HMA over the adjacent section of travel lane before the end of the following calendar day. The Contractor will also be responsible for installing additional warning signage that clearly defines the centerline elevation differential hazard. Unless otherwise addressed in the contract, the Contractor shall install additional centerline delineation such as a double RPM application, or temporary painted line for centerline depths exceeding ¾” inch, and provide a single RPM application placed on the newly placed pavement for ¾” inch or less layers. The Traffic Control Plan shall be amended to include this option and the additional requirements. All signs and traffic control devices will conform to Section 719.01, and Section 652, and will be installed prior to the work, at a maximum spacing of 0.50 mile for the entire length of effected roadway section. On roadways with two-way traffic, the Contractor will be required to place the specified course over the full width of the mainline traveled way being paved prior to opening the sections to weekend or holiday traffic. If this option is utilized, all additional signing, labor, traffic control devices, or incidentals will not be paid for directly, will be considered incidental to the appropriate 652 items.
21. The Contractor shall plan its construction sequencing so that no longitudinal joints fall within the mainline travelway lanes (excluding centerturn lanes.)
26. Centerline joint density testing shall be applied to the specified HMA layer. See Special Provision 401 – Hot Mix Asphalt Longitudinal Joint Density for project specifics.
28. The mixture shall meet the minimum requirements of Special Provision 401 – HMA Hamburg Wheel Tracker Specification with Hydrated Lime Option).
30. The required PGAB shall be a storage-stable, pre-blended, homogeneous, polymer modified asphalt binder that meets **PG 64E-28** grading requirements in AASHTO MP 19.

#### Tack Coat

A tack coat of emulsified asphalt, RS-1 or RS-1h, Item 409.15 shall be applied to any existing pavement at a rate of approximately 0.030 gal/yd<sup>2</sup>, and on milled pavement approximately 0.05 gal/yd<sup>2</sup> prior to placing a new course. A fog coat of emulsified asphalt shall be applied between shim /base courses and surface course as well as to any bridge membrane prior to the placement of HMA layers at a rate not to exceed 0.030 gal/yd<sup>2</sup>. Tack used will be paid for at the contract unit price for Item 409.15 Bituminous Tack Coat.

**SPECIAL PROVISION**  
**SECTION 502**  
**STRUCTURAL CONCRETE**  
 (QC/QA Acceptance Methods)

CLASS OF CONCRETE	ITEM NUMBER	DESCRIPTION	P	METHOD
A	608.07	Plain Concrete Sidewalk	-	C
A	608.26	Curb Ramp Detectable Warning Field	-	C
LP	626.31	18" Foundation	-	C
LP	626.332	30 Dia. > 8' Long & all 36" & 42" Dia. Foundations	-	C
LP	626.35	Controller Cabinet Foundation		C

SPECIAL PROVISION  
SECTION 534 - PRECAST STRUCTURAL CONCRETE  
Precast Concrete Box Culvert

Amend Standard Specification Section 534 – Precast Structural Concrete to include the following:

534.02 Materials

Add the following sentence to this Subsection:

Concrete shall be Class P.

534.07 Quality Control

A copy of the Contractor’s Quality System Manual (QSM) shall be provided.

534.19 Handling, Storage and Transportation

Units damaged by improper storing, hoisting or handling shall be replaced by the Contractor at no additional cost to the Department.

534.22 Basis of Payment

Add the following pay item to this Subsection:

<u>Pay Item</u>	<u>Pay Unit</u>
534.71 Precast Concrete Box Culvert	Lump Sum

**SPECIAL PROVISION**  
**SECTION 603 – PIPE CULVERTS AND STORM DRAINS**  
(Concrete Pipe Collar)

Amend Standard Specification Section 603 – Pipe Culverts and Storm Drains to include the following:

603.01 Description

Add the following paragraph to this Subsection:

This work shall also consist of furnishing and installing a concrete pipe collar to join the existing granite block box culvert to the proposed concrete pipe culvert in accordance with the details as shown on the plans. The contractor shall note that the pipe end and existing granite block box culvert are of different size and type.

603.02 Materials

Add the following materials to this Subsection:

Structural Concrete (Class A)	502.05
Welded Wire Fabric	709.02

603.03 Construction Requirements

Add the following sentence to this Subsection:

Construction requirements shall be in accordance with Section 502 - Structural Concrete

603.11 Method of Measurement

Add the following paragraph to this Subsection:

The concrete pipe collar shall be measured by each unit installed, complete in place and accepted. This shall be full compensation for furnishing labor and materials to construct a concrete pipe collar to connect the existing granite block box culvert to the proposed concrete pipe culvert in a suitable fashion.

603.12 Basis of Payment

Add the following paragraph to this Subsection:

Concrete pipe collars will be paid for at the Contract Unit price Each regardless of the size of the existing granite block box culvert and proposed concrete pipe culvert.

Payment will be made under:

	<u>Pay Item</u>	<u>Pay Unit</u>
603.4105	Concrete Pipe Collar	Each

SPECIAL PROVISION  
SECTION 603  
PIPE CULVERTS AND STORM DRAINS

603.12 Basis of Payment: This section shall be amended with the addition of the following:

<u>Pay Item</u>	<u>Pay Unit</u>
603.155 12" RCP Class III	LF
603.175 18" RCP Class III	LF
603.195 24" RCP Class III	LF
603.1952 24" RCP Class V	LF
603.205 30" RCP Class III	LF
603.215 36" RCP Class III	LF
603.132 8" Culvert Pipe Opt. III	LF

SPECIAL PROVISION  
SECTION 604  
MANHOLES AND CATCH BASINS

This section is amended by the addition of the following:

Description: This work consists of constructing catch basins and manholes in accordance with the requirements of Section 604 of the Standard Specifications and as shown in the Standard Details.

Method of Measurement: Measurement shall be in accordance with Subsection 604.05.

Basis of Payment: Payment shall be in accordance with Subsection 604.06.

Payment will be made under:

Pay Item		Pay Unit
604.076	60 Inch Catch Basin Type A1-C	Ea.
604.079	96 Inch Catch Basin Type A1-C	Ea.
604.093	60 Inch Catch Basin Type B1	Ea.
604.0956	96 Inch Catch Basin Type B1	Ea.
604.0957	96 Inch Catch Basin Type B1-C	Ea.
604.0752	96 Inch Catch Basin Type A1-C	Ea.

**SPECIAL PROVISION  
SECTION 609  
CURB  
(Vertical Curb - Special)**

This Section is amended by the addition of the following:

609.10 Basis of Payment

Payment will be made under:

<u>Pay Item</u>		<u>Pay Unit</u>
609.111	Vertical Curb Type 1 – Special (24 inch)	Linear Foot
609.1111	Vertical Curb Type 1 – Special (39 inch)	Linear Foot
609.19	Vertical Curb Type II	Linear Foot

SPECIAL PROVISION  
SECTION 609  
Curb

609.10 Basis of Payment: This section shall be amended with the addition of the following:

<u>Pay Item</u>	<u>Pay Unit</u>
609.2341 Terminal Curb Type I – 4ft. - Circular	Each
609.2381 Terminal Curb Type I – 8ft. – Circular	Each

SPECIAL PROVISION  
SECTION 627  
 PAVEMENT MARKINGS

627.04 General. The subsection is revised by the addition of the following:

Add: “Temporary pavement marking lines - center lines, shall be painted on all matched pavement within one week.

Temporary pavement marking lines - edge lines, shall be painted on all pavement layers within four weeks.

All Temporary pavement marking lines shall be painted prior to final striping.

Multilane sections, truck lanes, and milled surfaces shall have temporary pavement marking lines striped daily on all matched pavement layers.

Temporary Object Markers, TOMs, shall be used on all pavement layers until temporary pavement marking lines are applied.

TOMs, shall be removed prior to final striping.

TOMs, removal shall be addressed in the Traffic Control Plan.”

627.09 Method of Measurement. The Subsection is revised by the deletion of and replacement with the following:

Delete: “Temporary pavement marking lines shall be measured as one lump sum for work accepted.”

And replace with: “Temporary pavement marking lines shall be measured by the number of feet for work accepted.”

627.10 Basis of Payment. The last paragraph is amended as follows:

Remove the following: “The accepted quantity of temporary pavement marking lines will be paid for at the contract lump sum price and will include as many applications as required and removal when required.”

And replace with: “The accepted quantity of temporary pavement marking lines will be paid for at the contract unit price bid, per linear foot of temporary pavement markings installed and approved.

Temporary Object Markers, TOMs, will be considered incidental to Item No. 627.78.

Once Construction is Complete: Maintenance of Traffic Control Devices (652.36) will not be paid while waiting to final stripe. Liquidated Damages will not be charged while waiting to final stripe.”

<u>Pay Item</u>	<u>Pay Unit</u>
627.733      4” White or Yellow Painted Pavement Marking Line	LF
627.78        Temporary 4” Paint Pavement marking Line W Or Y	LF

**SPECIAL PROVISION**  
**SECTION 643**  
**Traffic Signals**

The provisions of Section 643 of the Standard Specifications shall apply with the following additions and modifications.

**643.01 Description** The intersection improvement project will result in the provision of a new and fully functional traffic signal control system at the intersection of US Route 1A and Forest Avenue/Forest Avenue Extension.

All signal equipment shall be provided in accordance with the “List of Major Items” found on the plan sheets. It is particularly noted that vehicle detection shall be by means of a “single 360 degree Aldis GridSmart camera strategically mounted rigidly with astro-brackets and pipe on an intersection mast arm. System to be equipped with GridSmart Reports software that will provide accurate vehicle detection, counting, classification, speeds, and directional movements”.

All traffic signal controller timing parameters shall be programmed to provide optimized free operations as called for in the plan sheets.

**643.0211 Additional Materials** Material shall also meet the requirements in the following Special Provision to Section of Division 700 - Materials:

Video Based 360 Degree Detection Device	718.13
Emergency Vehicle Preemption System	718.14
Pedestrian Crossing System	718.15

**643.071 Span Wire and Support Removal** The Contractor shall remove and dispose the existing span wire, tether wire, support pole and backguy at STA 1342+09, LT 36'. The Contractor shall backfill the area around the pole removal with selected earth or sand and loam and seed.

**643.12 Painting** Unless otherwise directed by the City of Ellsworth through the Resident Engineer, all exterior parts of the following equipment shall be delivered to the project finished as follows:

- Vehicular Signal Heads – Federal yellow housing with black doors.
- Signal Backplates – Black louvered.
- Pedestrian Signal Heads – All parts flat black.
- Controller Cabinets – Bare metal aluminum.
- Pedestal Posts and Bases – Bare metal aluminum.

**643.19 Basis of Payment** Traffic signal modifications (Item 643.71) will be paid for at the contract lump sum price, which payment will be full compensation for furnishing and installing all materials, including, but not limited to controllers, malfunction monitor units, vehicle and pedestrian signal heads with countdown timers, control cabinet,

accessible pedestrian signal (APS) buttons, emergency vehicle preemption, switches, wiring, signal cable, LED lamps, signs, removal of the existing span wire and supports, and all appurtenances and incidentals required for complete functioning installations and for furnishing all tools and labor necessary for completing the installations.

The video detection system (Item 643.83) will be paid for at the contract lump sum price, which payment will be full compensation for furnishing and installing all materials, including, but not limited to video processing unit, video camera, supervisory PC software, and all appurtenances and incidentals required for a complete functioning installation.

Mast arm poles (Item 643.91) and pedestal poles (Item 643.92) will be paid for at the contract unit price each which payment shall be full compensation for furnishing and installing all materials, tools and labor necessary to erect and install the structures.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
643.71 TRAFFIC SIGNAL MODIFICATION: US 1A/Forest Avenue	LS
643.83 VIDEO DETECTION SYSTEM: US 1A/Forest Avenue	LS

**SPECIAL PROVISION**  
**SECTION 648**  
**AGGREGATES**  
(Stone Ballast)

648.312 Stone Ballast Aggregate for stone ballast shall be clean and graded crushed stone aggregate with a hard, dense angular particle structure providing sharp corners and cubicle fragments with prime consideration for drainage efficiency.

The material retained on the  $\frac{3}{8}$  inch sieve shall contain not more than 5 percent, by weight of flat and elongated particles when performed in accordance with test method ASTM D 4791, Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate, using a dimensional ratio of 1:5.

The material shall have an absorption no greater than 1.5 percent by weight and a bulk specific gravity of less than 2.60 as determined in accordance with AASHTO T 85 modified for weight of sample.

The material shall not exceed 30 percent loss on ASTM C535 Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.

The material shall meet the grading requirements of the following table:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves	
	Type 4	Type 4A
2 ½ inch		100
2 inch	100	90-100
1 ½ inch	90-100	60-90
1 inch	20-55	10-35
$\frac{3}{4}$ inch	0-15	0-10
$\frac{3}{8}$ inch	0-5	0-3
No. 200	1.0 max.	1.0 max.

SPECIAL PROVISION  
SECTION 652  
MAINTENANCE OF TRAFFIC

Approaches Approach signing shall include the following signs as a minimum. Field conditions may warrant the use of additional signs as determined by the Resident.

- Road work Next x Miles
- Road work 500 Feet
- End Road Work

Work Area At each work site, signs and channelizing devices shall be used as directed by the Resident. Signs include:

- Road Work xxxx <sup>1</sup>
- One Lane Road Ahead
- Flagger Sign

Other typical signs include:

- Be Prepared to Stop
- Low Shoulder
- Bump
- Pavement Ends

The above lists of Approach signs and Work Area signs are representative of the contract Requirements. Other sign legends may be required.

The Contractor shall conduct their operations in such a manner that the roadway will not be restricted to one lane for more than 800 m [2,500 ft] at each work area. To encourage quality paving in warm-weather conditions, the length can be extended to 4,000 ft depending on the traffic impacts. Where more than one work area restricts traffic to one lane operation, these work areas shall be separated by at least 1.6 km [1 mile] of two way operation.

**Temporary Centerline** A temporary centerline shall be placed each day on all new pavement to be used by traffic. The temporary centerline, when specified of reflectorized traffic paint, shall conform to the standard marking patterns used for permanent markings.

Failure to apply a temporary centerline daily will result in a Traffic Control Violation and suspension of paving operations until temporary markers are applied to all previously placed pavement.

<sup>1</sup> “Road Work Ahead” to be used in mobile operations and “Road Work xx ft” to be used in stationary operations as directed by the Resident.

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**SPECIAL PROVISION**  
**SECTION 674 – PREFABRICATED CONCRETE MODULAR GRAVITY WALL**

Amend Standard Specification Section 674 – Prefabricated Concrete Modular Gravity Wall to include the following:

674.04 Design Requirements Add the following paragraph after Paragraph H of this Subsection:

- I. The actual factored bearing pressures under the PCMG Wall shall be clearly noted in the design submittal and indicated on the Shop Drawings.

674.04 Submittals Add the following sentence to the end of Paragraph B of this Subsection:

Details shall address surface water controls behind the top of the wall, groundwater controls behind the wall, and measures to limit erosion at the toe of the wall resulting from high water conditions in Davis Brook.

**SPECIAL PROVISIONS**  
**SECTION 718**  
**Traffic Signals Material**

The provisions of Section 718 of the Standard Specifications shall apply with the following additions and modifications:

**718.13 Video Based 360 Degree Detection Device** The video based detection device shall meet the following minimum performance standards:

- a. General - The device shall satisfy the following basic requirements:
1. The device shall utilize three dimensional, omni-directional tracking to provide real time vehicle detection. This data will be used by the local traffic signal controller as dynamic phase calls to service vehicles on a signalized approach.
  2. The device shall include a single wide camera with an ultra wide lens housed in a ruggedized Wintel platform.
  3. The device shall include vision stabilization, vehicle intent digital signal processing technology and electronic shutter speed control.
  4. A device control card and module shall be housed in the traffic signal control cabinet and support the interface between the field camera and the traffic signal controller.
  5. Multiple approach detection zone programming shall be user configurable.
  6. The device shall have the ability to interface to NEMA TS-1, NEMA TS-2, type 1 and NEMA TS-2, type 2 controllers providing real time vehicle demand data.
  7. The detection device shall support the following detection functions:
    - a. Vehicle Presence
    - b. Stopped Vehicle Presence
    - c. Directional
    - d. Pedestrian
  8. The detection device shall support the following vehicle classification functions:
    - a. Turn and Vehicle Speed Data
    - b. Vehicle Count per Lane
    - c. Vehicle Class Data, compiled in 32 user defined bins
    - d. Pedestrian
  9. The device shall be supplied complete with a traffic simulator feature that will allow for modeling of various traffic flow scenarios for system testing purposes.

10. The device shall be wirelessly configurable utilizing intuitive GUI based programming software.
11. The device shall employ a vehicle tracking point system that will follow these data points through the intersection image to minimize occlusion.

b. Video Camera - The camera shall meet the following requirements:

1. The camera shall draw 18 watts of electrical power.
2. The camera shall be support Wi-Fi transmission for initial system set-up and device diagnostics.
3. Operating range shall be -34°C to 74C° and humidity level up to 100%.
4. Camera enclosure shall be ¼” thick cast aluminum and conform to NEMA – 4 specifications, weather adjustable and a sunshield.
5. The lens shall be 360°wide, 5 megapixel with a CMOS image sensor.
6. Transmission at 100 Mbps IP, 1-10,000 LUX at a useable image digital output.

c. Control Card and Module – The control card and module shall meet the following requirements:

1. Card and module shall operate at 120 VAC, 60 Hz at 1.0 amps.
2. Operating range shall be -35°C to 75C° and humidity level up to 100%.
3. The card and module shall be rack mountable in the cabinet.
4. Processing shall be PC-104, embedded controller consisting of a dual Pentium caore, 2.8 Ghz, 1028 RAM and a 32 GB diskless harddrive.

**718.14 Emergency Vehicle Preemption System** The emergency vehicle preemption systems shall be installed in the same cabinet as the controller.

The emergency vehicle preemption control systems shall consist of a data-encoded phase selector to be installed within the traffic control cabinet. The unit will serve to validate, identify, classify, and record the signal from the optical detectors located on support structures at the intersections. Upon receiving a valid signal from the detectors, the phase selector shall generate a preempt call to the controllers initiating preemption operations as shown on the plans. The phase selector shall have full ID and logging capabilities and be a rack-mounted plug-in four channel, dual priority devices. The phase selector shall plug into shelf-mounted single card chasses. Programming the phase selector shall be via a PC-based computer utilizing unit specific software. One copy of the software, shall be supplied and licensed to the Town of Ellsworth. A hard copy of final programming data shall be left in the control cabinet. The Contractor shall supply a complete set of interface cables for phase selector to laptop connection in the controller cabinet. If applicable, the phase selector shall be connected to an Ethernet Switch in the cabinet, if and as shown in the Plans, such that the phase selector logs and configuration can be remotely accessed through the communications system. The Contractor shall supply and install any required converters, such as device servers or other devices, to interface the phase selector to the Ethernet switch in the cabinet. The Contractor shall also supply any required cables.

The optical detectors shall be single input, single output units used to control one approach. All traffic signal installations shall be supplied with a single optical detector for each approach to the intersection unless otherwise noted in the major items list or as shown on the plans.

The Contractor shall install the quantity of confirmation strobes as shown in the plans or as directed by the Engineer. The confirmation strobe shall serve to validate to the driver of the emergency vehicle that the traffic signal has recognized the preemption call and will initiate the proper preemption sequence. The confirmation strobe shall be illuminated whenever any emergency vehicle preemption green is on. The confirmation strobe shall be a red lens Whelan model 1500 or approved equivalent.

The Contractor shall be responsible for the proper programming of the phase selector, orientation of the optical detectors, and all other work necessary to provide a complete and operating emergency vehicle preemption system. The Contractor may be required to field adjust the location of the optical detectors in the presence of the Engineer and the Town of Ellsworth Fire Department to properly detect preemption calls from approaching vehicles.

**718.15 Pedestrian Crossing System** Pedestrian crossings must have 16-inch by 18-inch countdown pedestrian signals that count down during the pedestrian clearance interval. The pedestrian countdown modules shall be GE Lumination GT1 Series in 16 inch – McCain Model 1000 Series (yellow finish) housings or approved equivalent.

The Accessible Pedestrian Signal (APS) push buttons with locator tones shall be Campbell Company Advisor Model A915 or approved equivalent. Signs shall be posted at each audible signal push button stating which street may be crossed based upon the related push button. The audible walk interval messages used should be as follows:

- For proposed exclusive pedestrian phase – “Walk sign is on for all crossings”

The audible push button identification information messages used during the non-walk phases should be as follows:

- For proposed exclusive pedestrian phase – “Wait” or “Wait to cross”

**SPECIAL PROVISION**  
**SECTION 841**  
**(Removable Bollard)**

Description This work shall consist of furnishing and installing removable steel tube bollards, reinforced concrete foundation, and associated hardware necessary to complete the work as detailed on the plans. All earthwork, excavation, concrete, compacted backfill shall be incidental to the bollard.

Materials

1. The main body of the product shall be constructed from ASTM A500 in accordance with Section 713.01 steel and be accompanied with steel mill certifications/test reports for the steel being used to ensure the durability and performance of the product. Secondary and non-ASTM steel may not be substituted.
2. The reinforced concrete base circular pier footing shall meet the requirements of Section 502 – Structural Concrete, Class A and shall be reinforced with steel bars meeting the requirements of Section 503 – Reinforcing Steel, Plain Reinforcing Steel. The pier dimensions and reinforcing layout shall be as per the manufacturer’s recommendations.

Construction Requirements

1. Steel Bollards shall be spaced and located as shown on the plans. Final locations shall be adjusted in the field.
2. Bollard shall remove completely from the base unit. The bollard body shall be no more than eight (8) inches below grade to allow for minimal lifting efforts.
3. The removable bollard shall be lockable with a padlock. The padlock and keys will be provided by the City of Bangor, and shall be in-place before the new bridge is open to traffic.

Manufacturer Acceptable products and manufacturers include:

1. TrafficGuard Locking Key Lock Series Bollard (Model: RP3504L) as manufactured by Traffic Guard, LLC. [www.trafficguard.net](http://www.trafficguard.net)
2. MaxiForce Removable Bollard (Model: MRHP-RS2-HDH5) as manufactured by Blue Ember Technologies, LLC. [www.maxiforcebollards.com](http://www.maxiforcebollards.com)
3. Reliance Foundry Removable Receiver with Lid (Model: R-7902) as manufactured by Reliance Foundry Co. Ltd. [www.reliance-foundry.com](http://www.reliance-foundry.com)
4. Approved equal.

Finish

1. The bollard shall be primed with zinc rich coating system (primer) in accordance with Section 506.
2. The bollard shall have a Fusion Bonded Epoxy Coating finish (yellow, RAL1028) in accordance with Special Provision 506.

3. The steel bollard base and lid assembly shall be hot-dip galvanized in accordance with Section 506.
4. The lock assembly shall be Series 300 stainless steel.

Method of Measurement Bollards and all necessary incidentals to complete the work shall be paid for by each complete and accepted in place.

Basis of Payment The quantity of bollards will be paid for by the contract unit price for each installation. Such payment will be full compensation for all labor, excavation, backfill, tools, associated hardware, and any other incidentals necessary to complete the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
841.481      Removable Bollard	Each

**CITY OF  
ELLSWORTH**

**State Street Utility  
Replacement**

**Specifications –  
Issued for Bid**



One Merchants Plaza  
Bangor, Maine 04401  
800-564-2333

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COMMITMENT & INTEGRITY DRIVE RESULTS

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**City of Ellsworth, Maine  
December 2015**

CONTRACT DOCUMENTS  
FOR  
CITY OF ELLSWORTH  
STATE STREET WATER MAIN REPLACEMENT

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**Unit Price Bid – Base Bid**

<b>MDOT No.</b>	<b>Description</b>	<b>Units</b>	<b>Quantity</b>	<b>Value</b>
304.15	Aggregate Base Course – Type B	CY	475	\$
403.2081	Hot Mix Asphalt – 12.5mm Nominal Maximum Size (Polymer Modified)	TON	40	\$
403.213	Hot Mix Asphalt – 12.5mm Nominal Maximum Size (Base and Intermediate Course)	TON	110	\$
652.36	Maintenance of Traffic Control Devices	CD	10	\$
652.38	Flaggers	HR	1000*	\$
801.03	Test Pits	EA	5	\$
801.07	Temporary Sewer Bypass	LF	340	\$
801.131	10” Force Main	LF	275	\$
801.18	12” PVC Sanitary Sewer	LF	125	\$
802.16	4’ Diameter Precast Sewer Manhole	EA	1	\$
812.162	Adjusting Sewer Manhole to Grade	EA	19	\$
812.164	Rebuild Sewer Manhole	EA	4	\$
812.17	Sewer Drop Manhole	EA	1	\$
822.3152	2” Tapping Sleeve and Valve	EA	3	\$
822.3152	6” Tapping Sleeve and Valve	EA	2	\$
822.3152	8” Tapping Sleeve and Valve	EA	1	\$
822.3254	8” Insertion Valve	EA	1	\$
822.33	6” Class 52 D.I. Pipe	LF	920	\$
822.34	8” Class 52 D.I. Pipe	LF	1,180	\$
822.354	10” Insertion Valve	EA	3	\$
822.36	12” Class 52 D.I. Pipe	LF	2,630	\$
823.33	6” Gate Valve and Box	EA	2	\$
823.3251	8” Gate Valve and Box	EA	3	\$
823.311	12” Gate Valve and Box	EA	3	\$
824.30	Fire Hydrant	EA	7	\$

824.32	Relocate Existing Hydrant	EA	5	\$
825.312	3/4" Curb Stop and Box	EA	34	\$
825.323	2" Ball Valve	EA	1	\$
825.331	1" Curb Stop and Box	EA	1	\$
825.41	3/4" Copper Services	LF	900	\$
825.422	2" HDPE Water Main	LF	135	\$
825.43	1" Copper Services	LF	50	\$
825.53	6" Water Service Reconnect	EA	1	\$
825.541	Temporary Water Service	LF	3,980	\$
827.301	Rock Excavation Water Main	CY	20*	\$
827.302	Unsuitable Soil Excavation – Below Grade	CY	100*	\$
827.312	Select Backfill	CY	100*	\$
827.33	Trench Insulation	LF	975*	\$
832.07	Owner's Testing Allowance	ALLOW	1	\$

## SECTION 01 20 00

### MEASUREMENT & PAYMENT

#### PART 1 – GENERAL

##### 1.01 DESCRIPTION

- A. Scope: This Section describes the measurement and payment for the Work to be completed under each Base Bid item in the Bid Form. The descriptions may not reference all of the associated Work. Work specified but not specifically designated as a Bid item is considered incidental to all Bid items.
- B. Payment Procedures: Payment procedures are described in the agreement, General Conditions and related documents.

##### 1.02 DESCRIPTION OF BASE BID ITEMS

- A. Bid Item 304.15– Aggregate Base – Type B
  - 1. Payment: Unit price per cubic yard as stated in the Bid.
  - 2. Measurement: For aggregate base required to repair trenches for water mains and services outside the limits of the MDOT project, aggregate shall be measured by the cubic yard installed.
  - 3. Includes: Aggregate base, testing, and all other materials and labor required to provide a complete installation as required by the Contract Documents or as directed by the Engineer in the field.
- B. Bid Item 403.2081 – Hot Mix Asphalt – 12.5mm Nominal Maximum Size (Polymer Modified)
  - 1. Payment: Unit price per ton as stated in the Bid.
  - 2. Measurement: For pavement repair required to repair trenches for water mains and services outside the limits of the MDOT project, pavement shall be measured by the ton installed.
  - 3. Includes: Grinding/removal of existing pavement/cutbacks, pavement markings, testing, and all other materials and labor required to provide a complete installation as required by the Contract Documents or as directed by the Engineer in the field.
- C. Bid Item 403.213 – Hot Mix Asphalt – 12.5mm Nominal Maximum Size (Base and Intermediate Course)
  - 1. Payment: Unit price per ton as stated in the Bid.

2. Measurement: For pavement repair required to repair trenches for water mains and services outside the limits of the MDOT project, pavement shall be measured by the ton installed.
  3. Includes: Binder course, testing, and all other materials and labor required to provide a complete installation as required by the Contract Documents or as directed by the Engineer in the field.
- D. Bid Item 652.36 – Maintenance of Traffic Control Devices
1. Payment: Unit price per calendar day as stated in the Bid.
  2. Measurement: Measured in accordance with Division 600 of the MDOT Standard Specifications.
  3. Includes: Maintain traffic control devices in accordance with Division 600 of the MDOT Standard Specifications.
- E. Bid Item 652.38 – Flaggers
1. Payment: Unit price per hour as stated in the Bid.
  2. Measurement: Measured in accordance with Division 600 of the MDOT Standard Specifications.
  3. Includes: Provide flaggers in accordance with Division 600 of the MDOT Standard Specifications.
- F. Bid Item 801.03 – Test Pits
1. Payment: Unit price per each as stated in the Bid.
  2. Measurement: Measured as units.
  3. Includes: Earthwork and surface restoration to perform test pits on the Drawings and as directed by the Engineer.
- G. Bid Item 801.07 – Temporary Sewer Bypass
1. Payment: Unit price per linear foot as stated in the Bid.
  2. Measurement: As measured along the horizontal projection of the centerline of the pipe.
  3. Includes: All equipment, material, and labor associated with temporary piping necessary to provide uninterrupted sewer service within the Project area including installation and testing. The connection to the existing sewer system shall be incidental to this item.

- H. Bid Item 801.131 – 10” Force Main
1. Payment: Unit price per linear foot successfully installed as stated in the Bid.
  2. Measurement: As measured along the horizontal projection of the centerline of the pipe; measure from and to inside face of manhole. Include plugged stubs.
  3. Includes: All equipment, material, and labor associated with excavation, bedding, backfill, shoring and bracing, dewatering, pipe and fittings, removal and disposal of existing sewer, dust control, testing, loam and seed, and all associated work as specified and shown on the Drawings.
- I. Bid Item 801.18 – 12” PVC Sanitary Sewer
1. Payment: Unit price per linear foot as stated in the Bid.
  2. Measurement: As measured along the horizontal projection of the centerline of the pipe; measure from and to inside face of manhole. Include plugged stubs.
  3. Includes: All equipment, material, and labor associated with excavation, bedding, backfill, shoring and bracing, dewatering, pipe and fittings, removal and disposal of existing sewer, dust control, testing, loam and seed, bypass pumping, and all associated work as specified and shown on the Drawings.
- J. Bid Item 802.16 – 4’ Diameter Precast Sewer Manhole
1. Payment: Unit price per each as stated in the Bid.
  2. Measurement: Measured per each unit installed.
  3. Includes: All equipment, material, and labor associated with earthwork, shoring and bracing; dewatering, new manholes, new frames and covers, inverts, waterproofing, testing, removal and disposal of existing manholes, swing ties and GPS location of manhole, bypass pumping, and all piping, fittings and supports contained within the manhole as specified and as shown on Drawings or as directed by the ENGINEER.
- K. Bid Item 812.162 – Adjusting Sewer Manhole to Grade
1. Payment: Unit price per each as stated in the Bid.
  2. Measurement: Measured per each unit adjusted.

3. Includes: All equipment, material, and labor associated with adjusting the existing sewer manholes to match the grade of the proposed roadway at the following locations:

North Street (Old Route 179)

- a. 82+08
- b. 84+58
- c. 202+66

Lakes Lane

- a. 31+30

State Street (U.S. Route 1A)

- a. 1307+12
- b. 1309+26
- c. 1310+95
- d. 1323+83
- e. 1326+97
- f. 1327+30
- g. 1337+56
- h. 1340+60
- i. 1344+63
- j. 1346+56
- k. 1351+60
- l. 1351+92
- m. 1354+60
- n. 1357+75
- o. 1360+50

L. Bid Item 812.164 – Rebuild Sewer Manhole

1. Payment: Unit price per each as stated in the Bid.
2. Measurement: Measured per each unit installed.
3. Includes: All equipment, material, and labor associated with providing new sewer manhole cones at the following locations:
  - a. 1297+77
  - b. 1313+58

- c. 1316+36
- d. 1320+21
- M. Bid Item 812.17 – Sewer Drop Manhole
  1. Payment: Unit price per each as stated in the Bid.
  2. Measurement: Measured per each unit installed.
  3. Includes: All equipment, material, and labor associated with earthwork, shoring and bracing; dewatering, new manholes, new frames and covers, inverts, waterproofing, testing, removal and disposal of existing manholes, swing ties and GPS location of manhole, bypass pumping, and all piping, fittings and supports contained within the manhole as specified and as shown on Drawings or as directed by the ENGINEER.
- N. Bid Item 822.3152 – 2”, 6”, & 8” Tapping Sleeve and Valve
  1. Payment: Unit price per each as stated in the Bid.
  2. Measurement: Measured per each unit installed.
  3. Includes: Excavation, tapping sleeve, line tapping, gate valve, shoring and bracing, dewatering, backfill, erosion control, bedding, fittings, pipe, thrust blocks, surface restoration, calcium chloride dust control, site restoration, and all other materials and labor required to provide a complete installation as shown on the Drawings and not specified elsewhere.
- O. Bid Items 822.33, 822.34, & 822.36 – 6”, 8”, & 12” Class 52 D.I. Pipe
  1. Payment: Unit price per linear foot successfully installed as stated in the Bid Form.
  2. Measurement: As measured along the horizontal projection of the centerline of the pipe.
  3. Includes: Excavation, backfill, shoring and bracing, dewatering, erosion control, bedding, pipe, fittings including tees and wyes, thrust blocks, flushing, testing, disinfection, temporary blow-offs, and all other materials and labor required to provide a complete installation not specified elsewhere. The connection to existing water mains shall be incidental to this item. Ductile iron pipe used in hydrant laterals shall not be included in this item and shall be included in Bid Item 824.30 – Fire Hydrant.
- P. Bid Items 822.3254 & 822.354 – 8” & 10” Insertion Valve
  1. Payment: Unit price per each as stated in the Bid.
  2. Measurement: Measured per each unit installed.

3. Includes: Insertion valve and valve box, surface restoration, loaming and seeding, and all other materials and labor required to provide a complete installation as specified and shown on the Drawings.
- Q. Bid Items 823.33, 823.3251, & 823.311 – 6”, 8”, & 12” Gate Valves & Boxes
1. Payment: Unit price per each as stated in the Bid Form.
  2. Measurement: Measured per each unit installed.
  3. Includes: Provide valve and valve box, providing one valve box wrench to be used for all gate valves, excavation, backfill, shoring and bracing, dewatering, erosion control, and all other materials and labor required to provide a complete installation as specified and shown on the Drawings. Gate valves for hydrants are not included in this item and shall be included in Bid Item 824.30 – Fire Hydrant.
- R. Bid Item 824.30 – Fire Hydrant
1. Payment: Unit price per each as stated in the Bid Form.
  2. Measurement: Measured per each unit installed.
  3. Includes: Provide all fittings, pipe, hydrant tee, 6” gate valve, valve box, hydrant extensions if necessary, thrust blocks, accessories, earthwork and materials, surface restoration including repairing sidewalks and curbs, loaming and seeding, and all other materials and labor required to provide a complete hydrant tee, valve, and hydrant installation as specified and shown on the Drawings.
- S. Bid Item 824.32 – Relocate Existing Hydrant
1. Payment: Unit price per each as stated in the Bid Form.
  2. Measurement: Measured per each unit relocated.
  3. Includes: All materials, labor, and equipment required to relocate existing hydrants as specified and shown on the Drawings and in the following locations:
    - a. 1296+00
    - b. 1312+50
    - c. 1316+50
    - d. 1321+95
    - e. 1326+40
- T. Bid Item 825.312 & 825.331 – 3/4” & 1” Curb Stop & Box

1. Payment: Unit price per each as stated in the Bid.
  2. Measurement: Measured per each unit installed.
  3. Includes: Curb stop and service box, surface restoration, earthwork, erosion control, backfill, shoring and bracing, loaming and seeding, and all other materials and labor required to provide a complete installation as specified and shown on the Drawings.
- U. Bid Item 825.323 – 2” Ball Valve
1. Payment: Unit price per each as stated in the Bid Form.
  2. Measurement: Measured per each unit installed.
  3. Includes: Provide valve and valve box, excavation, backfill, shoring and bracing, dewatering, erosion control, and all other materials and labor required to provide a complete installation as specified and shown on the Drawings.
- V. Bid Item 825.41 & 825.43 – 3/4” & 1” Copper Services
1. Payment: Unit price per linear foot as stated in the Bid Form.
  2. Measurement: As measure in place along the horizontal centerline of the water service from the centerline of water main to existing water service.
  3. Includes: All equipment, material, and labor associated with water service pipe, fittings and valves, corporations, pipe unloading, stringing, earthwork, erosion control, backfill, shoring and bracing, installation of pipe, fittings, and valves, dewatering, connecting to the existing service line, disinfection, testing, and appurtenances for copper service lines as specified and as shown on the Drawings or as directed by the Engineer.
- W. Bid Item 825.422 – 2” HDPE Water Main
1. Payment: Unit price per linear foot successfully installed as stated in the Bid Form.
  2. Measurement: As measured along the horizontal projection of the centerline of the pipe.
  3. Includes: Excavation, backfill, shoring and bracing, dewatering, erosion control, bedding, pipe, fittings including tees and wyes, thrust blocks, flushing, testing, disinfection, temporary blow-offs, and all other materials and labor required to provide a complete installation not specified elsewhere. The connection to existing water mains shall be incidental to this item.

- X. Bid Item 825.53 – 6” Water Service Reconnect
1. Payment: Unit price per each as stated in the Bid.
  2. Measurement: Measured per each unit installed.
  3. Includes: All MJ fittings, pipe, hydrant tee, 6” gate valve, valve box, thrust blocks, accessories, earthwork and materials, surface restoration including repairing sidewalks and curbs, loaming and seeding, and all other materials and labor required to provide a complete hydrant tee, valve, and connection to the existing 6” sprinkler line as specified and shown on the Drawings.
- Y. Bid Item 825.541 – Temporary Water
1. Payment: Unit price per linear foot installed as stated in the Bid Form.
  2. Measurement: As measured along the horizontal projection of the centerline of the pipe.
  3. Includes: All temporary piping and surface restoration necessary to provide uninterrupted service in areas noted within the Project area including installation, backflow prevention, testing, and disinfection in accordance with State and City regulations.
- Z. Bid Item 827.301 – Rock Excavation Water Main
1. Payment: Unit price per cubic yard as stated in the Bid Form for all rock excavation required for the installation of piping, etc.
  2. Measurement: Measurement in place prior to excavation within pay limits shown on the Drawings or as Specified
  3. Includes: Drilling and blasting, excavation, removal, and disposal of rock and boulders greater than 2 cubic yards each and replacement as necessary with suitable material as directed by the ENGINEER. Material that can be excavated from the trench as identified in Section 31 20 00 will not be considered for payment. Pre-blast surveys are considered incidental to this pay item.
- AA. Bid Item 827.302 – Unsuitable Soil Excavation – Below Grade
1. Payment: Unit price per cubic yard as stated in the Bid Form.
  2. Measurement: As measured by the ENGINEER within the limits as specified or directed.
  3. Includes: Excavation and replacement of materials determined by the ENGINEER as unsuitable for pipe or structure subgrade.

- BB. Bid Item 827.312 – Select Backfill
1. Payment: Unit price per cubic yard as stated in the Bid Form.
  2. Measurement: As measured in place within the pay limits shown on the Drawings and as directed by the ENGINEER.
  3. Includes: Select backfill as specified and as directed by the ENGINEER.
- CC. Bid Item 827.33 – Trench Insulation
1. Payment: Unit price per linear foot as stated in the Bid Form. Unit price is for 2” thick and 4’ wide insulation.
  2. Measurement: Measured in place as shown on the Drawings or as directed by the Engineer.
  3. Includes: Insulation over pipe as shown on the Drawings or as directed by the Engineer.
- DD. Bid Item 832.07 – Owner’s Testing Allowance
1. Payment: Actual costs incurred.
  2. Measurement: Submit bills from testing firm.
  3. Includes: Testing costs such as compaction tests, etc., that are specified as Owner’s responsibility shall be paid for by the Contractor using the allowance allotted in this item. All testing costs specified as the Contractor’s responsibility shall remain so and in no way shall the included allowance be used for such costs. All testing costs shall be billed directly to the Contractor and a final Change Order will be issued balancing the actual testing costs to the Owner and stated allowance.

**PART 2 – PRODUCTS (Not Used)**

**PART 3 – EXECUTION**

**3.01 GENERAL**

- A. Measurement: Notify ENGINEER when necessary measurements must be taken. Do not proceed until measurements have been taken.

**END OF SECTION**

## SECTION 01 33 00

### SUBMITTALS

#### PART 1 – GENERAL

##### 1.01 DESCRIPTION OF REQUIREMENTS

- A. Submittal Requirements: Submittal requirements specified in this section include shop drawings, product data, and miscellaneous work-related submittals. Individual submittal requirements are specified in applicable sections for each unit of work. Refer to other Division-1 sections and other contract documents for requirements of administrative submittals.
- B. Definitions: Work-related submittals of this section are categorized for convenience as follows:
  - 1. Shop drawings include specially-prepared technical data for this project, including drawings, diagrams, data sheets, schedules, patterns, instructions, measurements and similar information not in standard printed form.
  - 2. Product data include standard printed information on materials, products and systems; not specially-prepared for this project.
  - 3. Samples include both fabricated and unfabricated physical examples of materials, products and units of work; both as complete units and as smaller portions of units of work; either for limited visual inspection or (where indicated) for more detailed testing and analysis.
  - 4. Miscellaneous submittals related directly to the work (non- administrative) include warranties, quality testing and certifying reports, and copies of industry standards.

##### 1.02 GENERAL SUBMITTAL REQUIREMENTS

- A. Scheduling: Show principal work-related submittals in job progress schedule.
- B. Coordination and Sequencing: Coordinate preparation and processing of submittals with performance of the work so that work will not be delayed by submittals.
- C. Preparation of Submittals: Provide permanent marking on each submittal to identify project, date, CONTRACTOR, subcontractor, submittal name and similar information to distinguish it from other submittals. Show CONTRACTOR's executed review and approval marking.

- D. Transmittal Form: Provide places to indicate project, date, "To:", "From:", names of subcontractors, suppliers, manufacturers, required references, category and type of submittal, purpose, description, distribution record (for both transmittal and submittals), and signature of transmitter.

### 1.03 SPECIFIC-CATEGORY SUBMITTAL REQUIREMENTS

- A. General: Except as otherwise indicated in individual work sections, comply with requirements specified herein.
- B. Shop Drawings: Provide newly-prepared information, with graphic information at accurate scale (except as otherwise indicated), with name of preparer indicated (firm name). Show dimensions and note which dimensions are based on field measurement. Identify materials and products in the work shown. Indicate compliance with standards, and special coordination requirements. Do not allow shop-drawing copies without appropriate final "Action" markings by ENGINEER to be used in connection with the work.

Submit 3 copies for ENGINEER use; all additional copies will be returned for CONTRACTOR's use.

- C. Product Data: Collect required data into one submittal for each unit of work or system; and mark each copy to show which choices and options are applicable to project. Include manufacturer's standard printed recommendations for application and use, compliance with standards, notation of field measurements, which have been checked, and special coordination requirements. Maintain one set of product data (for each submittal) at project site, available for reference by ENGINEER and others.

Submit 3 copies for ENGINEER use; all additional copies will be returned for CONTRACTOR's use.

- D. Samples: Provide units identical with final condition of proposed materials or products for the work. Include information with each sample to show generic description, source or product name and manufacturer, limitations, and compliance with standards.
- E. Inspection and Test Reports: See Section 01 40 00.
- F. Warranties: Refer to "Products" section for specific general requirements on warranties, product/workmanship bonds, and maintenance agreements. In addition to copies desired for CONTRACTOR's use, furnish 2 executed copies, except furnish 2 additional copies where required for maintenance manuals.
- G. Standards: Where workmanship at project site and elsewhere is governed by standard, furnish additional copies to fabricators, installers and others involved in performance of the work.

- H. Closeout Submittals: Refer to individual work sections and General Conditions for specific requirements.

Record Document Copies "As Builts": Furnish three sets of complete "As Built" Drawings with swing ties to all water and sewer system components.

- I. General Distribution: Provide additional distribution of submittals (not included in foregoing copy submittal requirements) to subcontractors, suppliers, fabricators, installers, governing authorities, and others as necessary for proper performance of the work. Include such additional copies in transmittal to ENGINEER where required to receive "Action" marking before final distribution. Record distributions on transmittal forms.

#### **1.04 ACTION ON SUBMITTALS**

- A. ENGINEER's Action: ENGINEER will review each submittal, and return within 10 calendar days of receipt. Where submittal must be held for coordination, CONTRACTOR will be so advised by ENGINEER without delay.
- B. Action Stamp: ENGINEER's action stamp, for use on submittals to be returned to CONTRACTOR, is self-explanatory as marked.

**PART 2 – PRODUCTS (Not Used)**

**PART 3 – EXECUTION (Not Used)**

**END OF SECTION**

## SECTION 01 40 00

### PROCEDURES & PERFORMANCES – QUALITY CONTROL

#### PART 1 – GENERAL

##### 1.01 DESCRIPTION OF WORK

- A. Minimum requirements for quality control, procedures, and performance Work of a general nature include but are not necessarily limited to the following:
1. Supervisory personnel
  2. Tradespersons and workmanship standards
  3. Utilities
  4. Inspections, tests and reports
  5. Safety Controls: OSHA Requirements
  6. General installation provisions
  7. Cutting and patching
  8. Cleaning and protection
  9. Environmental Controls: Water Pollution and Dust Control

##### 1.02 RELATED SECTIONS

- A. Section 31 20 00 – Earthwork
- B. Section 31 25 00 – Slope Protection & Erosion Control

##### 1.03 SUPERVISORY PERSONNEL

- A. Submittal of Staff Names, Duties: Within 10 days of Contract date, submit a listing of CONTRACTOR's principal staff assignments, naming persons and listing their addresses and telephone numbers. Specifically indicate persons to contact in the event of emergency or problems at the site who are available 24 hours a day, 7 days a week.

##### 1.04 TRADESPERSONS AND WORKMANSHIP STANDARDS

- A. General: Persons performing Work at site shall be skilled and knowledgeable in methods and craftsmanship needed to produce required quality-levels for workmanship in completed Work. Remove and replace Work which does not comply with workmanship standards as Specified and as recognized in the

construction industry for applications indicated. Remove and replace other Work damaged or deteriorated by faulty workmanship. Remove and replace workers responsible for non-complying Work and/or poor workmanship.

## 1.05 UTILITIES

- A. General: Cooperate with utility companies involved. Follow their recommendations and requirements for protection and repair of utilities. Maintain protection of utilities for the duration of the Work. Prior to starting Work become familiar with all utilities and pipelines which may be affected by performance of the Work and have them located in the field as Work progresses, and costs associated with field locations by utilities shall be borne by the CONTRACTOR.
- B. Damage to Utilities: Repair damage resulting from CONTRACTOR's operations to the satisfaction of the ENGINEER and the utility company involved.

Repairs are at the CONTRACTOR's expense.

- C. Underground Utilities: Alignment and elevations of known underground utilities are indicated on the Drawings where possible. Completeness and accuracy of this information is not guaranteed. Utilities that are not shown on the Drawings, but can be readily located by contacting the appropriate utility, will be considered as utilities shown on the Drawings and will not be considered for extra payment requests unless a direct on-grade conflict occurs.
- D. Adjustments in grade and alignment of the Work or utilities may be made by the ENGINEER to avoid interference. Where utilities must be relocated, and the utility is not shown on the plans, payment will be negotiated as extra Work provided the ENGINEER is notified and additional costs are estimated prior to the relocation.

## 1.06 INSPECTIONS, TESTS, AND REPORTS

- A. General: Provide testing and inspection services where required by Contract Documents. Cooperate with all testing laboratory personnel.

Where no testing is specifically required but the OWNER or ENGINEER decides that testing is required, the OWNER may direct that such testing be performed under current standards for testing. Payment will be made as described in this Section.

- B. Reports: Submit test/inspection reports, including agency's analysis of results and recommendations where applicable, in duplicate to ENGINEER except as otherwise indicated, and submit copies directly to governing authorities where required or requested.
- C. Payment for Testing:

1. General: Where testing is the OWNER's responsibility, payment will be made as stated below unless other requirements are given in technical sections. Testing which is the responsibility of the CONTRACTOR will be designated in technical sections.
  2. Initial Testing: OWNER will pay for initial tests. If initial tests indicate non-compliance, costs of initial tests will be deducted from the contract sum.
  3. Retesting: Costs of retesting due to non-compliance will be paid by the CONTRACTOR. The cost of retesting will be determined by ENGINEER.
  4. CONTRACTOR's Convenience Testing: Inspections and tests performed exclusively for the CONTRACTOR's convenience will be paid for by the CONTRACTOR.
- D. Qualifications of Testing Laboratory: Acceptable to ENGINEER, OWNER, and CONTRACTOR, meets ASTM requirements for type of testing to be performed.
- E. Coordination of Testing: Notify the ENGINEER and testing laboratory when Work will be ready for testing. Allow adequate time to schedule tests with testing laboratory.

If scheduled tests or sampling cannot be performed due to incomplete Work, testing costs due to the delay will be paid by the CONTRACTOR.

## 1.07 SAFETY CONTROLS

- A. All project Work and activities shall comply with all applicable OSHA regulations, as per Title 29 CFR Chapter XVII. The CONTRACTOR shall be responsible for ensuring compliance of all personnel on-site whether employed by the CONTRACTOR or not, as well as site visitors and the OWNER and his representatives.
- B. The CONTRACTOR shall provide Material Safety Data Sheets (MSDS) for all chemicals and other applicable materials to the OWNER prior to bringing such materials on-site. This includes all materials whether used in the project work or not.
- C. No asbestos containing materials shall be brought on-site, whether used in the project work or not.
- D. No regulated lead containing products as per the Consumer Product Safety Act shall be brought on-site, whether used in the project work or not.

**PART 2 – PRODUCTS (Not Used)**

**PART 3 – EXECUTION**

**3.01 CLEANING AND PROTECTION**

- A. General: Clean and protect Work in progress and adjoining Work on a continuous basis. At reasonable intervals, completely remove debris and waste materials from site. The ENGINEER may specify clean-up intervals if necessary. Protect installed Work to prevent damage or deterioration. Perform maintenance on newly installed Work as necessary through construction period. Adjust and lubricate operable components to ensure operability without damage.
- B. Limiting Exposures of Work: Protect Work whether completed or in progress, from harmful, dangerous, damaging, or otherwise deleterious exposures during construction period.

**3.02 ENVIRONMENTAL CONTROLS**

- A. Water Pollution Control: Take all precautions necessary to prevent contaminating, polluting, or silting of water courses or water storage areas as outlined in Section 31 25 00 – Slope Protection and Temporary Erosion Control.
- B. Dust Control: Provide measures to control dust caused by construction operations, whether on or off site. Provide periodic sweeping as required by the ENGINEER.

**END OF SECTION**

## SECTION 01 42 00

### DEFINITIONS & STANDARDS

#### PART 1 – GENERAL

##### 1.01 DEFINITIONS

- A. General Explanation: A substantial amount of specification language constitutes definitions for terms found in other contract documents, including drawings which must be recognized as diagrammatic in nature and not completely descriptive of requirements indicated thereon. Certain terms used in contract documents are defined generally in this article. Definitions and explanations of this section are not necessarily either complete or exclusive, but are general for the work to the extent not stated more explicitly in another provision of the contract documents.
- B. General Requirements: The provisions or requirements of Division-1 sections. General Requirements apply to entire work of Contract and, where so indicated, to other elements which are included in project.
- C. Indicated: The term "Indicated" is a cross-reference to details, notes or schedules on drawings, to other paragraphs or schedules in the specifications, and to similar means of recording requirements in contract documents. Where terms such as "shown," "noted," "scheduled," and "specified" are used in lieu of "indicated," it is for purpose of helping reader locate cross-reference, and no limitation of location is intended except as specifically noted.
- D. Directed, Requested, etc.: Where not otherwise explained, terms such as "directed," "requested," "authorized," "selected," "approved," "required," "accepted," and "permitted" mean "directed by ENGINEER," "requested by ENGINEER," etc. However, no such implied meaning will be interpreted to extend ENGINEER's responsibility into CONTRACTOR's area of construction supervision.
- E. Approve: Where used in conjunction with ENGINEER's response to submittals, requests, applications, inquiries, reports and claims by CONTRACTOR, the meaning of term "approved" will be held to limitations of ENGINEER's responsibilities and duties as specified in General and Supplementary Conditions. In no case will "approval", by ENGINEER be interpreted as a release of CONTRACTOR from responsibilities to fulfill requirements of contract documents.
- F. Project Site: The space available to CONTRACTOR for performance of the work, either exclusively or in conjunction with others performing other work as part of the project. The extent of project site is shown on the drawings, and may or may not be identical with description of the land upon which project is to be built.

- G. Furnish: Except as otherwise defined in greater detail, term "furnish" is used to mean supply and deliver to project site, ready for unloading, unpacking, assembly, installation, etc., as applicable in each instance.
- H. Install: Except as otherwise defined in greater detail, term "install" is used to describe operations at project site including unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing protecting, cleaning and similar operations, as applicable in each instance.
- I. Provide: Except as otherwise defined in greater detail, term "provide" means furnish and install, complete and ready for intended use, as applicable in each instance.
- J. Installer: The entity (person or firm) engaged by CONTRACTOR or its subcontractor or sub-subcontractor for the performance of a particular unit of work at project site, including installation, erection, application and similar required operations. It is a general requirement that such entities (Installers) be expert in operations they are engaged to perform.
- K. Testing Laboratory: An independent entity engaged to perform specific inspections or tests of the work, either at project site or elsewhere, and to report and (if required) interpret results of those inspections or tests.

## 1.02 SPECIFICATION EXPLANATIONS

- A. Overlapping and Conflicting Requirements: Where compliance with two or more industry standards or sets of requirements is specified, and overlapping of those different standards or requirements establishes different or conflicting minimums or levels of quality, most stringent requirement (which is generally recognized to be also most costly) is intended and will be enforced, unless specifically detailed language written into the contract documents (not by way of reference to an industry standard) clearly indicates that a less stringent requirement is to be fulfilled. Refer apparently-equal-but-different requirements, and uncertainties as to which level of quality is more stringent, to ENGINEER for a decision before proceeding.
- B. CONTRACTOR's Options: Except for overlapping or conflicting requirements, where more than one set of requirements are specified for a particular unit of work, option is intended to be CONTRACTOR's regardless of whether specifically indicated as such.
- C. Minimum Quality/Quantity: In every instance, quality level or quantity shown or specified is intended as minimum for the work to be performed or provided. Except as otherwise specifically indicated, actual work may either comply exactly with that minimum (within specified tolerances), or may exceed that minimum within reasonable limits. In complying with requirements, indicated numeric values are either minimums or maximums as noted or as appropriate for context

of requirements. Refer instances of uncertainty to ENGINEER for decision before proceeding.

- D. Specialists; Assignments: In certain instances, specification text requires (or at least implies) that specific work be assigned to specialists or expert entities, who must be engaged for performance of those units of work. These must be recognized as special requirements over which CONTRACTOR has no choice or option. These assignments must not be confused with (and are not intended to interfere with) normal application of regulations, union jurisdictions and similar conventions. One purpose of such assignments is to establish which party or entity involved in a specific unit of work is recognized as "expert" for indicated construction processes or operations. Nevertheless, final responsibility for fulfillment of entire set of requirements remains with CONTRACTOR.

### 1.03 INDUSTRY STANDARDS

- A. General Applicability of Standards: Applicable standards of construction industry have same force and effect (and are made a part of contract documents by reference) as if copied directly into contract documents, or as if published copies were bound herewith.
1. Referenced standards (referenced directly in contract documents or by governing regulations) have precedence over non-referenced standards which are recognized in industry for applicability to work.
  2. Non-referenced standards recognized in the construction industry are hereby defined, except as otherwise limited in contract documents, to have direct applicability to the work, and will be so enforced for performance of the work.
- B. Copies of Standards: Provide where needed for proper performance of the work; obtain directly from publication sources.
- C. Abbreviation and Names: Where acronyms or abbreviations are used in specifications or other contract documents they are defined to mean the industry recognized name of trade association, standards generating organization, governing authority or other entity applicable to context of text provision. Refer to "Encyclopedia of Associations," published by Gale Research Co., available in large libraries.

### 1.04 SUBMITTALS

- A. Permits, Licenses and Certificates: For the OWNER's records, submit copies of permits, licenses, certifications, inspection reports, releases, notices, receipts for fee payments, judgments, and similar documents, correspondence and records established in conjunction with compliance with standards and regulations bearing upon performance of the work.

227652.00  
Issue Date: December 2015

State Street Utility Replacement  
City of Ellsworth, ME

**PART 2 – PRODUCTS (Not Used)**

**PART 3 – EXECUTION (Not Used)**

**END OF SECTION**

## SECTION 01 51 38

### TEMPORARY WATER BYPASS

#### PART 1 – GENERAL

##### 1.01 SUMMARY

A. Section Includes

1. Providing, testing, operating and maintaining temporary bypass water mains as shown on the Drawings, or as modified by Contractor and approved, including service connections, tap holes and temporary hydrants to prevent interruption of water service or fire protection during water main construction or bypass installation/removal.

##### 1.02 PRICE AND PAYMENT PROCEDURES

- A. Measurement and payment requirements: per Division 01 General Requirements.

##### 1.03 REFERENCES

A. Reference Standards

1. American National Standards Institute (ANSI)
  - a. ANSI/NSF 61, Drinking Water System Components – Health Effects
2. American Water Works Association (AWWA)
  - a. AWWA C651
3. ASTM International (ASTM)
  - a. ASTM A135
  - b. ASTM D1248
  - c. ASTM D3350
4. Factory Mutual (FM)
5. NSF International (NSF)
6. Underwriters Laboratories Inc. (UL)

#### 1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordination, Sequencing, and Scheduling: in accordance with Division 01 General Requirements.

#### 1.05 SUBMITTALS

- A. Submit in accordance with Division 01 General Requirements.
  - 1. Submit a plan and schedule of the proposed temporary bypass of water main system including any alterations, at least 14 days prior to implementation and prior to the start of construction.
  - 2. Minimum contents of water bypass pumping plan and schedule:
    - a. Plan showing the layout of temporary water mains including: connections to existing hydrants, taps to existing water mains and fire services, street crossings, existing water main valves to be operated, and location of temporary hydrants, valves, and sampling locations
    - b. Description of connection procedures for domestic services, details and a description of installation procedures for tap hole connections to existing mains and fire services, and disinfection procedures
    - c. A daily schedule outlining the locations where temporary water mains will be installed and notification procedures for business owners and residents
    - d. List of spare parts for maintenance and repairs to temporary bypass and service connections with location where the spare parts will be stored
  - 3. An emergency contact list with a minimum of 3 employees skilled in the maintenance and repair of the temporary by-pass systems, knowledgeable of the bypass system in use, with specific knowledge of its operational requirements and valve location, and who are available 24 hours per day/ 7 days per week, and able to respond to emergency repair calls within a maximum of 2 hours. Include at a minimum name, address, home and mobile telephone number for each employee listed.
  - 4. Connection/disconnection written notice to property owners

#### 1.06 QUALITY ASSURANCE

- A. Provide in accordance with Division 01 General Requirements.

#### 1.07 SITE CONDITIONS

- A. Existing Conditions: per Division 01 General Requirements.

## **PART 2 – PRODUCTS**

### **2.01 TEMPORARY BYPASS WATER MAIN**

- A. Temporary bypass water main pipe and fittings
  - 1. High density polyethylene (HDPE) pipe: manufactured from high density, extra high molecular weight compound equaling a PE 3408 designation and conforming to ASTM D1248 and ASTM D3350, with a cell classification of 345434C.
- B. Minimum working pressure: 150 psi and capable of withstanding vehicular traffic loading.
- C. Minimum wall thickness for HDPE pipe
  - 1. 8-inch pipe: 0.784 inches
  - 2. 6-inch pipe: 0.602 inches
  - 3. 4-inch pipe: 0.409 inches
  - 4. 2-inch pipe: 0.216 inches
- D. Temporary pipe couplings: restrained joint, designed to resist flexure and torsion loads, UL and C-UL listed, FM approved with a minimum working pressure of 750 psi. Gaskets: ANSI/NSF 61 approved for use with potable water.

### **2.02 TEMPORARY WATER SERVICE CONNECTIONS**

- A. Temporary water service connections: minimum 3/4-inch polyethylene or rubber hose tubing complying with ANSI/NSF 61 and approved by Owner prior to installation.

### **2.03 TEMPORARY HYDRANTS AND GATES**

- A. Temporary hydrants: acceptable to and supported by a means approved by the local Fire Department to prevent deflection of the hydrant or bypass piping system when the hydrant is in operation.
- B. Provide temporary gate valves that are in good working order and capable of sealing completely when closed.

## **PART 3 – EXECUTION**

### **3.01 GENERAL**

- A. Minimum required temporary bypass water mains are included on the Drawings. Submit alterations to the temporary bypass water main system, including alterations

in diameter, to Engineer for review and approval prior to beginning any Work on the Project.

- B. Interruption of water service or fire protection is not permitted during water main construction or bypass installation/removal.
  - 1. Connect temporary bypass water mains to the existing distribution system at both ends to maintain continuity in the distribution system. “Dead-ending” of the bypass system is not permitted, unless otherwise approved by Owner.
  - 2. Take necessary measures, including tapping existing water mains and installing gate valves when existing hydrants and existing gate valves are unavailable for use, to assure continuous water service and fire protection.
- C. Furnish, install, maintain, and remove service hoses or pipes of approved size, to service all consumers from gated connections on the bypass pipe.
- D. Provide separate temporary water connection for each building. Directly connecting one building to another is prohibited.
- E. Furnish and install temporary bypass water main, temporary hydrants, temporary in-line gate valves, temporary house service connections, temporary service blow backs and permanent gate valves prior to water main replacement construction. Install temporary bypass water mains as indicated on the Drawings unless otherwise approved or directed by Owner. Provide for fire flow interconnections and water service connections to all businesses and residents affected by the Work.
  - 1. Temporary hydrants: installed, at a minimum, adjacent to existing hydrants. Provide additional temporary hydrants when required by the local Fire Department at no additional cost to the Owner.
  - 2. Provide temporary gate valves that are good working order and seal completely when closed. Locate gate valves where shown on the Drawings. If a bypass plan has not been included on the Drawings, at a minimum install gate valves at all hydrant connections, tap hole connections and branch lines. Provide additional temporary gate valves when directed by the Engineer at no additional cost to the Owner. Install gate valves at hydrant connections after the temporary hydrant to ensure temporary hydrant remains live if this gate is closed.
- F. Supply bypass pipes from connections made to hydrants or existing water mains that are to remain in service. Furnish fittings and make necessary connections required to supply water to the bypass pipes (including services), including approved corporation stops, tapping sleeves, tap holes, bulkheads, and plugs at dead end mains.

- G. Provide minimum inconvenience to property owners during connection and disconnection. Coordinate with and contact property owners by written notice at least 48 hours in advance of performing connections and disconnections. Submit notice to the Owner for approval prior to distributing to property owners.

### 3.02 PIPING

- A. Temporary bypass pipe and other materials shall provide adequate water tightness. Exercise care throughout the installation of the temporary mains and service connections to avoid possible contamination of water mains or house services or contamination of the temporary bypass pipe itself. Flush and disinfect ALL temporary mains and services to prevent contamination in accordance with AWWA C651.
- B. Lay temporary piping along the general lines of streets or roadways to cause minimum disruption and avoid damage. Unless otherwise directed by Owner, ramp 4-inch or smaller bypass piping with temporary bituminous pavement, cold patch, or other approved material on each side of the pipe at driveways and sidewalks. Bury bypass piping greater than 4-inch in diameter at driveway and sidewalk crossings.
  - 1. Take additional precautions to minimize public inconvenience in areas where bypass and/or service pipe or hoses may be considered an obstruction to safe passage, including installation of additional ramping on both sides of the bypass pipe or burying the bypass pipe at building walkway entrances, at sidewalk crossings, and in other areas where the piping is considered an obstruction to safe passage.

2. At street crossings, cut a narrow trench in the existing pavement sufficiently wide and deep enough to allow placement of the bypass pipe just below the roadway surface, placement temporary hot-mix asphalt surfacing above it, and compaction by approved means. Make flush with the adjacent pavement. Compaction of temporary surfacing by vehicular traffic is not allowed. Upon removal of the bypass piping, backfill trench with gravel material, properly compacted, and restore to service with a permanent hot-mix asphalt surface at no additional cost to Owner.

### **3.03 OPERATION AND MAINTENANCE**

- A. When the bypass water main system has been tested and is approved to be put into service, maintain 24 hours per day, 7 days per week until the Work has been completed and the bypass system has been removed.
- B. Complete all sections of the Project in progress before the daily low temperature falls below 35 degrees Fahrenheit. Maintain all components of the bypass system impacted by freezing conditions, including service connections and take reasonable measures when scheduling Work as cold weather season approaches. Should it become necessary to stop Work and remove the bypass system due to freezing conditions, re-install, chlorinate, test, and return the temporary bypass system to service at no additional cost to the Owner.

### **3.04 REMOVAL**

- A. After the existing water mains have been replaced and new water mains put into service, remove components of the temporary bypass system immediately and perform bituminous patching required for temporary lines.

**END OF SECTION**

## SECTION 01 51 40

### TEMPORARY SEWAGE BYPASS

#### PART 1 – GENERAL

##### 1.01 SUMMARY

- A. Provide, operate, and maintain a functional bypass pumping system capable of bypassing each area of Work without leakage or spillage of sewage upon the ground or streets or back up of sewage into any building or onto any property for the duration of the Project.
- B. Design Requirements:
  - 1. Provide temporary bypass pumping adequate to handle dry weather and wet weather flows and to protect against surcharging of the existing system upstream of the Work area.

##### 1.02 PRICE AND PAYMENT PROCEDURES

- A. Measurement and payment requirements: per Division 01 General Requirements.

##### 1.03 ADMINISTRATIVE REQUIREMENTS

- A. Coordination, Sequencing, and Scheduling: in accordance with Division 01 General Requirements.

##### 1.04 SUBMITTALS

- A. Submit in accordance with Division 01 General Requirements.
  - 1. Bypass pumping plan for each bypass location prior to implementation and prior to the start of construction
  - 2. Minimum contents of sewage bypass pumping plan:
    - a. Standard Operating Procedure: Describe the normal sequence of events to be followed while pumping and setting up and breaking down pumping equipment. Plan must address strategies and safeguards to ensure that public safety and environmental health is maintained at all times, the possibility of property damage and wetlands impacts, and overall level of inconvenience is minimized.
    - b. Layout drawing showing locations of equipment on Site and how access to the Site is maintained
    - c. Equipment lists

- d. Pump curves and motor and engine data demonstrating equipment is sufficiently sized to meet all specified and anticipated operating conditions
  - e. Notification form
  - f. Emergency Response Plan: Describe the intended means of handling the following situations, including response and clean-up measures, and emergency backup power or backup fuel storage. List equipment to be used and where it will be stored.
    - Break or failure of bypass line (pipe)
    - Failure of bypass pump
    - Overflow
    - Back up into dwelling or onto private property
    - Failure of bypass pumping system to accommodate flow
3. Shop Drawings for equipment and materials including, but not limited to:
- Pumps
  - Engines and/or Motors
  - Sound Enclosures
  - Pipe or hose
  - Joints/couplings
  - Plugs and/or bladders
4. Statement of Qualifications demonstrating experience of the firm in accordance with Article 1.04 and listing a minimum of 20 successful bypass pumping projects conducted in the last ten years. Provide contact information for no fewer than 5 of these projects which:
- Have been completed in the last 5 years,
  - Involved similar equipment to that proposed for this Project, and

### 1.05 QUALITY ASSURANCE

- A. Provide in accordance with Division 01 General Requirements.
- B. Qualifications: per Division 01 General Requirements and as follows.
  1. Bypass pumping system shall be provided, operated, and maintained by a firm which has been regularly engaged in providing bypass pumping for a minimum of 10 years.

### 1.06 SITE CONDITIONS

- A. Existing Conditions: per Division 01 General Requirements.

- B. The Project area consists of active sanitary sewers; therefore, flows and flow data are variable depending on location and conditions. Visit the Work locations prior to start of Work to visually inspect flow conditions as necessary.

## **PART 2 – PRODUCTS**

### **2.01 BYPASS PUMPING SYSTEM**

- A. Godwin Pumps (a Xylem brand)
- B. Griffin Dewatering
- C. Rain for Rent
- D. Or equal

### **2.02 PUMPS, PIPES & FITTINGS**

- A. Provide pumps suitable for use with raw, unscreened sewage and capable of conveying the volume of flow anticipated with a sufficient margin of safety. Provide for 100 percent redundancy (2 pumps the Site for every 1 pump required) if flow cannot be returned to the sewer at any time if pumping system failure occurs.
  - 1. Redundant pumping: suction and discharge piping with quick connect couplings to facilitate change out of pumps.
- A. Pumps: hydraulically-driven submersible. Provide two duty pumps and one redundant pump of equal size.
- B. Pump Connections: quick connect couplings to facilitate change out of pumps
- C. Pipe: carbon steel, fused high-density polyethylene pipe, or equal.
- D. Joints: Victaulic or approved equal.
- E. Fittings: quick-connect type.
- F. Lay-flat hose: extra heavy duty, highly abrasion resistant, fitted with gasketed couplings, and rated for 150 percent of working pressure.
- G. Provide sound attenuation enclosure for engines and pumps in accordance with state and local noise requirements.
- H. Control: automatic level control for pumps. Redundant pump shall start automatically if one duty pump fails.
- I. Autodialers: provide autodialers with capacity to call up to 3 different phone numbers upon low fuel and pump failure.

## **PART 3 – EXECUTION**

### **3.01 GENERAL**

- A. Maintain flows under all flow conditions. Adequately handle flows, even instantaneous peak flows, without damage or overflow, providing for potential large instantaneous flow contributors connected to the sewer under repair.
- B. Allow for passage of traffic and protect bypass piping at driveway and street crossings.
- C. Coordinate bypassing with low-flow times to the extent possible. Prevent overflows or backups.
- D. If Contractor determines bypass pumping is not required at a location due to lack of flow or determines that a Work item does not require bypass pumping to be performed, and Engineer agrees, protect flows from construction debris and ensure no debris enters the sewer system.
- E. Repair damage to existing pipes and structures to the satisfaction of the Engineer.
- F. Prevent sanitary flow from discharging into salt or fresh water body by means of overflow, bypass pumping, or other methods.
- G. Restore normal service to entire system at end of normal working hours each day.

### **3.02 SHUTDOWN**

- A. Shutdown is not permitted without prior approval of the Owner. Maintain flow of wastewater at all times with no interruption of service. Any costs associated with the shutdown, coordination with the Utility, or maintaining interrupted service shall be the responsibility of the Contractor.

### **3.03 TEMPORARY POWER**

- A. Provide fuel and power to run bypass pumps at no additional cost to Owner.

### **3.04 PIPING**

- A. Provide that piping system has adequate water tightness. Perform a leakage test with clean water at Engineer's direction, at no additional cost to Owner.
- B. Lay temporary piping along the general lines of streets or roadways in a manner that causes the minimum amount of disruption and is least likely to be damaged. Use temporary bituminous pavement, cold patch, or other approved material to form a ramp on each side of the pipe or depress the pipe at driveways to allow for property owners to drive over the temporary pipe as directed by the Engineer.

**3.05 OPERATION AND MAINTENANCE**

- A. Continuously monitor bypassing operations regardless of duration or timing of bypassing. Unattended bypass pumping is prohibited.
- B. Arrange for bypass pumping past working hours with Engineer and provide adequate sound attenuation and an attendant.
- C. Do not allow leaks in bypass pumping systems. Clean and disinfect leaks at no additional cost to Owner.

**END OF SECTION**

## SECTION 31 20 00

### EARTHWORK

#### PART 1 – GENERAL

##### 1.01 DESCRIPTION OF WORK

- A. Work included: All excavating, filling, backfilling, and removal of materials. Earthwork for utilities is included in this section.
- B. Related Work:
  - 1. Section 31 25 00 – Slope Protection and Temporary Erosion Control
  - 2. Section 31 40 00 – Shoring and Bracing

##### 1.02 PROTECTION

- A. Paved surfaces: Do not operate equipment on paved surfaces which will damage these surfaces.
- B. Maintain excavations with approved barricades, lights, and signs to protect life and property until excavation is filled and graded to a condition acceptable to the ENGINEER.
- C. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.
- D. Provide Preblast Survey in accordance with 3.02C of this section.

##### 1.03 QUALITY ASSURANCE

- A. Testing and Inspection: See Section 01 40 00 for general requirements. CONTRACTOR will pay for all aggregate gradation testing. OWNER will pay for moisture maximum density tests and field compaction tests as stated in Section 01 40 00, except as otherwise noted in this section.
- B. Seismic and Preblast Survey Firm: Company specializing in seismic surveys with five years documented experience.
- C. Explosives Firm: Company specializing in explosives for disintegration of subsurface rock with five years documented experience.

##### 1.04 REFERENCES

- A. NFPA 495 - Code for the Manufacturer, Transportation, Storage, and Use of Explosive Materials

## 1.05 REGULATORY REQUIREMENTS

- A. Conform to applicable codes & NFPA 495 for explosive disintegration of rock.
- B. Obtain permits from authorities having jurisdiction before explosives are brought to site or drilling is started.

## 1.06 SUBMITTALS

- A. Test Reports: Submit the following:
  - 1. Reports on material gradations
- B. Blasting Records: See paragraph 3.02B

## 1.07 JOB CONDITIONS

- A. Site Information: Data on indicated subsurface conditions are not intended as representations or warranties of accuracy or continuity between soil borings. It is expressly understood that OWNER will not be responsible for interpretations or conclusions drawn therefrom by CONTRACTOR. Data is made available for convenience of CONTRACTOR.

Additional test borings and other exploratory operations may be made by CONTRACTOR at no cost to OWNER.

- B. Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies for shut-off of services if lines are active.
- C. Test Pits: Excavate test pits where shown on the Drawings or as directed by the ENGINEER. Comply with earthwork requirements of this section. Excavation of Test Pits shall be considered incidental to the Project.
- D. Use of Explosives: Permitted, see Part 3 - Execution for requirements.

## PART 2 – PRODUCTS

### 2.01 MATERIALS

- A. General:
  - 1. Suitable materials: As shown on the Drawings or as specified.
  - 2. Unsuitable materials: Material containing excessive plastic clay, vegetation, organic matter, debris, pavement, stones or boulders over 6 inches in greatest dimension, and frozen material. Material which, in the opinion of the ENGINEER, will not provide a suitable foundation or subgrade.

3. On-Site Material: Any suitable material from on-site excavation.
4. Material for embankments and general fills may contain pieces of excavated ledge having a greatest dimension of up to 6 inches if approved by the ENGINEER.
5. Inspection: The ENGINEER may inspect off-site sources of materials and order tests of these materials to verify compliance with these Specifications.

B. Aggregate Base: Hard durable gravel containing only particles passing the 2-inch sieve. All material shall meet MDOT "Standard Specification" Section 703.06 Type A aggregate. The material shall have the following sieve analysis by weight:

<u>Sieve Size</u>	<u>% Passing by Weight</u>
2"	100
1/2"	45-70
1/4"	30-55
No. 40	0-20
No. 200	0-5

C. Aggregate Subbase (also Gravel): Hard, durable stone with coarse to fine sand. All particles shall pass the 6-inch sieve and meet MDOT "Standard Specification" Section 703.06 Type D aggregate. That portion which passes the 3-inch sieve shall have the following sieve analysis by weight:

<u>Sieve Size</u>	<u>% Passing by Weight</u>
3"	100
1/4"	25-70
No. 40	0-30
No. 200	0-7

D. Sand: Sieve analysis by weight:

<u>Sieve Size</u>	<u>% Passing by Weight</u>
3/8"	100
No. 4	95-100
No. 16	50-85
No. 100	2-10

E. 3/4" Crushed Stone: Durable, clean angular rock fragments obtained by breaking and crushing rock material. Sieve analysis by weight:

<u>Sieve Size</u>	<u>% Passing by Weight</u>
1"	100

3/4"	95-100
1/2"	35-70
3/8"	0-25
No. 200	0-2

- F. 2" Crushed Stone: Durable, clean angular rock fragments obtained by breaking and crushing rock material. Sieve analysis by weight:

<u>Sieve Size</u>	<u>% Passing by Weight</u>
2"	100
1"	35-70
No. 4	0-5
No. 200	0-1

- G. Refill Material: Crushed stone for refilling excavation below grade or rock excavation unless otherwise directed by the ENGINEER.

- H. Common Borrow: Earth suitable for embankment construction free from frozen material, perishable rubble, peat and other unsuitable material.

Moisture content: Sufficient to provide required compaction and stable embankment but not exceeding 4% above optimum as determined using AASHTO T180, method C or D.

- I. Select Backfill: Use gravel as specified above.

- J. Underdrain Filter Sand: Granular material for underdrain shall be free from organic matter and shall conform to the MDOT "Standard Specifications" Section 703.22 for underdrain Type B. Sieve analysis by weight:

<u>Sieve Size</u>	<u>% Passing by Weight</u>
1"	100
1/2"	75-100
No. 4	50-100
No. 20	15-80
No. 50	0-15
No. 200	0-5

### PART 3 – EXECUTION

#### 3.01 EXCAVATION

- A. General: Remove all materials encountered to the limits shown on the Drawings, or designated in the Specifications.

- B. Classifications: The following classifications of excavation may be made which will be paid for on a unit cost basis:
1. Rock Excavation
  2. Excavation below normal grade
  3. Measurement and payment for these classifications are described in Section 01 20 00 – Measurement and Payment.
  4. Do not perform rock excavation or excavation of unsuitable materials until material to be excavated has been cross-sectioned and classified by ENGINEER.
  5. Predrilling and blasting of bedrock through overburden may be allowed. However, if this method is used, the rock excavation quantities will be adjusted downward in proportion to the ground swell from this blasting method.
- C. Earth excavation: Removal and disposal of pavements and other obstructions visible on ground surface, underground structures and utilities indicated to be demolished and removed, and other materials encountered that are not classified as rock excavation or unauthorized excavation.
- D. Excavation for Structures: Conform to elevations and dimensions shown within a tolerance of plus or minus 0.10', and extending a sufficient distance from footings and foundations to permit placing and removal of concrete formwork, installation of services, other construction, and for inspection.

In excavating for footings and foundations, take care not to disturb bottom of excavation. Excavate by hand to final grade just before concrete reinforcement is placed. Trim bottoms to required lines and grades to leave solid base to receive other Work.

- E. Rock excavation: Removal and disposal of materials that cannot be excavated without drilling and blasting, or requiring use of special equipment, except such materials that are classified as earth excavation.

Typical materials classified as rock are solid rock, rock in ledges, and rockhard cementitious aggregate deposits two cubic yards or more in volume.

Intermittent drilling or ripping performed to increase production and not necessary to permit excavation of material encountered will be classified as earth excavation.

Rock excavation does not include the removal of material which can be removed with a hand pick or power shovel or loose or previously blasted rock or broken stone in rock fills or elsewhere.

- F. Rock payment lines:
1. Two feet outside of concrete Work for which forms are required, except footings and base slabs.
  2. Manhole and Pipe trenches: as shown on Drawings or as required for installation of manholes, pipe and bedding material.
  3. Neat outside dimensions of concrete Work where no forms are required.
  4. Under slabs on grade: 6" below bottom of concrete slab or as shown on Drawings.
- G. Excavation in Paved Areas: Cut pavement prior to excavation to provide a clean, uniform edge. Minimize disturbance of remaining pavement. Cut and remove the minimum amount of pavement required to do the Work.
- Use shoring and bracing where sides of excavation will not stand without undermining pavement.
- H. Excavation for Trenches: Excavate to widths shown on the Drawings.
- Produce an evenly graded flat trench bottom at the subgrade elevation required for installation of pipe and bedding material.
- Load excavated material directly into trucks unless otherwise permitted by the ENGINEER.
- Place backfill material directly into trench or excavation. Do not stockpile material to be used as backfill in roadways or along edges of trenches.
- I. Unauthorized excavation: Removal of materials beyond indicated subgrade elevations or dimensions without specific direction of ENGINEER. Unauthorized excavation, as well as remedial Work directed by ENGINEER including refilling, is at CONTRACTOR's expense.
- J. Refilling Unauthorized Excavation:
- Trenches: Use crushed stone or gravel as directed by ENGINEER.
- Elsewhere, backfill and compact unauthorized excavations as specified for authorized excavations of same classification, unless otherwise directed by ENGINEER.
- K. Excavation of Unsuitable Materials: When excavation has reached required subgrade elevations, notify ENGINEER who will make an inspection of conditions. If unsuitable bearing materials are encountered at required subgrade elevations, carry excavations deeper as directed by ENGINEER and replace excavated material with gravel or crushed stone.

Removal of unsuitable material and its replacement as directed will be paid for at CONTRACT PRICE as described in Section 01 20 00.

- L. Material Storage: Stockpile and maintain suitable surplus excavated materials for re-use as backfill anywhere within the PROJECT limits as directed by the ENGINEER. Place, grade, and shape stockpiles for proper drainage.

Locate and retain soil materials away from edge of excavations.

### 3.02 BLASTING

- A. General: Obtain approval of OWNER before blasting.

Perform blasting in accordance with the following:

- 1. "Manual of Accident Prevention in Construction" issued by Associated General Contractors of America, Inc.
  - 2. "Construction Safety Rules and Regulations" as adopted by the State Board of Construction Safety, Augusta, Maine.
  - 3. Section 107.12 of the "Standard Specifications", Maine Department of Transportation.
- B. Submit an accurate record on an approved form, containing the following information of each blast to the ENGINEER on a daily basis.
    - 1. General location of blast.
    - 2. Depth and number of drillholes.
    - 3. Type and quantity of explosive used.
    - 4. Time of blast.
    - 5. Seismographic record of each blast taken at nearest structure.
  - C. Preblast Survey will be done by CONTRACTOR: Provide preblast survey prior to any blasting or blasting related operations. Survey to be performed by an independent business entity with a minimum 5 years experience in similar type surveys.
    - 1. Preblast Survey to include but not be limited to:
      - a. Still photos taken at 50 foot maximum stationing. (4" x 6" glossy color prints).
      - b. Video tape of entire construction area.

- c. Video tape of each structure within construction area to show both interior and exterior preblast conditions. Highlight existing defects in structures and pavements. Provide some means of establishing scale of existing defects. i.e.: include tape measure or folding ruler at defect during videotaping.
- d. Videotaping must be done with commercial grade equipment to allow equipment still viewing without distortion of the viewed area.
- e. Still photos and video tapes shall be retained by the preblast surveyor and shall be available for viewing by the OWNER and ENGINEER within 24 hours upon request.

### 3.03 STABILITY OF EXCAVATIONS

- A. General: Slope sides of excavations to comply with OSHA Regulations and Local Codes. Shore and brace where sloping is not possible due to space restrictions or stability of material excavated.

Maintain sides and slopes of excavations in safe condition until completion of backfilling.

- B. Refer to Section 31 40 00 for shoring and bracing requirements.

### 3.04 DEWATERING

- A. General: Perform all Work in the dry. Prevent surface water and subsurface or groundwater from flowing into excavations and from flooding PROJECT site and surrounding area.
- B. Do not allow water to accumulate in excavations. Provide and maintain pumps, dewatering system components necessary to convey water away from excavations.
- C. Convey water removed from excavations and rain water to collecting or run-off areas. Establish and maintain temporary drainage ditches and other diversions outside excavation limits for each structure. Do not use trench excavations as temporary drainage ditches.

### 3.05 BACKFILL AND FILL

- A. General: Place acceptable soil material in layers to required elevations as shown on the Drawings and as listed below.

Fill, backfill, and compact to produce minimum subsequent settlement of the material and provide adequate support for the surface treatment or structure to be

placed on the material. Place material in approximately horizontal layers of beginning at lowest area to be filled. Do not impair drainage.

- B. Ground Surface Preparation: Remove vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills. Scarify surfaces so that fill material will bond with existing surface.

When existing ground surface has a density less than that specified under "Compaction" for particular area classification, break up ground surface, pulverize, moisture-condition to optimum moisture content, and compact to required depth and percentage of maximum density.

- C. Placement: Place backfill and fill materials in layers not more than 12" in loose depth for material compacted by heavy compaction equipment, and not more than 6" in loose depth for material compacted by hand-operated tampers. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.

Place backfill and fill materials evenly adjacent to structures, to required elevations. Take care to prevent wedging action of backfill against structures by carrying material uniformly around structure to approximately same elevation in each lift.

Do not allow heavy machinery within 5 feet of structure during backfilling and compacting.

- D. Backfill excavations as promptly as Work permits, but not until completion of the following:
1. Acceptance of construction below finish grade including, dampproofing, waterproofing, and perimeter insulation.
  2. Inspection and recording locations of underground utilities.
  3. Removal of concrete formwork.
  4. Removal of shoring and bracing, and backfilling of voids with satisfactory materials. Cut off temporary sheet piling driven below bottom of structures and remove in manner to prevent settlement of the structure or utilities, or leave in place if required.
  5. Removal of trash and debris.
  6. Permanent or temporary horizontal bracing is in place on horizontally supported walls.
  7. Backfill cast-in-place concrete structures when the concrete has developed adequate strength.

8. Use care in backfilling to avoid damage or displacement of underground structures and pipe.
9. Backfill under all existing utility pipes crossed by sewer construction with 3/4" crushed stone. The crushed stone back- fill will extend continuously from the bedding of the new sewer to the utility pipe crossed, including a 6" thick envelope of crushed stone all around the existing utility pipes.
10. The 3/4" crushed stone backfill shall stand at its own angle of repose. No "haunching" or "forming" with common fill will be allowed.

E. Backfilling Trenches: See Trench Detail on the Drawings

Trenches in cross-country runs: Restore surface to that existing prior to construction. Mound trench 6 inches above existing grade if required by the ENGINEER.

F. Replacement of unsuitable materials:

Below normal grade: see paragraph 3.01K.

Above normal grade: replace unsuitable material with suitable stored onsite material. All excess suitable on-site material must be used before additional off-site material is used. If additional material is required use Select Backfill.

**3.06 COMPACTION**

- A. Methods: Use methods which produce the required degree of compaction throughout the entire depth of material placed without damage to new or existing facilities and which are approved by the ENGINEER. Adjust moisture content of soil as required. Remove and replace material which is too wet to compact to required density. Compact each horizontal layer of till and slopes as Work progresses.
- B. Degree of Compaction: Compact to the following minimum densities:

FILL AND BACKFILL LOCATION	DENSITY
Under structure foundations	95% of max.
2 feet under pavement and above	95%
2 feet under pavement and below	92%
Trenches through unpaved areas	90%
Embankments (including slopes)	90%
Pipe Bedding	92%
Beside structure foundation walls, retaining walls, tank walls	90%
Under pipes through structural fills	90%
Maximum density: ASTM D1557, modified	

Field density tests: ASTM D1556 (sand cone), ASTM D2167 (rubber balloon), or ASTM D2922 (nuclear methods).
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C. Testing:

Determine actual in place densities using field tests as directed by the ENGINEER. Tests will be made by an independent laboratory. Costs for initial tests will be paid by OWNER; see Section 01 40 00 – Procedures and Performances. Failing tests and subsequent retests will be paid by CONTRACTOR.

Perform additional Work to obtain proper compaction if in-place densities do not meet the specified densities. Retesting may be required by the ENGINEER.

D. Minimum Number of Tests:

1. Paved Areas and Building Subgrade: Make at least one field density test of subgrade for every 2000 sq. ft. of paved area or building slab, but in no case less than 3 tests.
2. Other Fill Areas: In each compacted fill layer, make one field density test for every 2000 sq. ft. of overlaying building slab or paved area, but in no case less than 3 tests.
3. Pipe Trenches: At least one test per 100 L.F. of trench per fill layer.

### 3.07 GRADING

- A. Grading: Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.
- B. Grading Outside Structure Lines: Grade areas adjacent to structure lines to drain away from structures and to prevent ponding.
- C. Finish surfaces free from irregular surface changes, and as follows:
  1. Lawn or Unpaved Areas: Finish areas to receive topsoil to within not more than 0.10' above or below required subgrade elevations.
  2. Pavements: Shape surface of areas under pavement to line, grade and cross-section, with finish surface not more than 1/2" above or below required subgrade elevation.

3. Fill Under Slabs: Grade smooth and even, free of voids, compacted as specified, and to required elevation. Provide final grades within a tolerance of 1/2" when tested with a 10' straightedge.
4. Compaction: After grading, compact subgrade surfaces to the percentage of maximum density for each area classification.

### **3.08 MAINTENANCE**

- A. Protection of Graded Areas: Protect newly graded areas from traffic and erosion. Keep free of trash and debris.

Repair and re-establish grades in settled, eroded, and rutted areas to specified tolerances.

- B. Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, re-shape, and compact to required density prior to further construction.

### **3.09 DISPOSAL OF EXCESS MATERIALS**

- A. Removal from Site:

Remove excess excavated material, and dispose of it in approved spoils areas.

Grade material to the satisfaction of the OWNER of the property on which the material is deposited. Keep roads free of debris. Use suitable watertight vehicles for hauling wet materials over roads and streets. Clean up materials dropped from or spread by vehicles promptly or when directed by the ENGINEER.

**END OF SECTION**

## SECTION 31 25 000

### SLOPE PROTECTION AND EROSION CONTROL

#### PART 1 – GENERAL

##### 1.01 DESCRIPTION OF WORK

- A. Provide and maintain devices to control erosion, siltation, sedimentation and dust that occurs during construction operations. Undertake every reasonable precaution and do whatever is necessary to avoid erosion of soil and to prevent silting of wetland areas, drainage ditches, streams, and lakes.
- B. Provide measures to control dust caused whether on or off the Project site.
- C. Deficiencies in erosion control measures indicated by failures or erosion shall be immediately corrected by providing additional measures or different techniques to correct the situation and prevent subsequent erosion.
- D. Exposure of soils on embankments, excavations, and graded areas shall be kept as short as possible. Initiate seeding and other erosion control practices as soon as reasonably possible.
- E. Provide erosion control measures in any ditch, swale or channel before water is allowed to flow in the waterway.
- F. Mechanized Equipment will not be permitted in water courses unless specifically required in the Contract Documents.

##### 1.02 QUALITY ASSURANCE

- A. Conform to all requirements of applicable federal, state and local permits, and Contract Documents, and conform to the recommendations of the Erosion Control Handbook (see Part D below) whether the measures are specifically noted herein, or not.
- B. Conform to all requirements of the DEP Permits obtained by the Maine Department of Transportation.
- C. Meet with the ENGINEER to discuss erosion control requirements prior to the start of construction.
- D. Standards: "Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices" prepared by the Cumberland County Soil and Water Conservation District, latest edition, hereinafter referred to as Erosion Control Handbook.

- E. Standards: "Maine Erosion and Sediment Control on Commercial, Industrial, Residential, Recreation and Government Construction Sites; Environmental Quality Handbook" prepared by the Maine Soil and Water Conservation Commission, latest edition, hereinafter referred to as Environmental Quality Handbook.

### 1.03 SUBMITTALS

- A. Erosion Control Program: Prepare and submit to ENGINEER for approval prior to construction startup.

## PART 2 – PRODUCTS

### 2.01 MATERIALS

- A. General: Use the following materials in construction of sediment traps, erosion control devices, and slope protection as specified on the DRAWINGS. Other materials require approval of the ENGINEER.
- B. Heavy Rip-Rap: Sound, durable rock which will not disintegrate due to exposure to water or weather; angular in shape such as rough, unhewn quarry stone or fragments obtained by blasting, breaking or crushing natural rock.

Round boulders or cobbles will not be permitted.

Stone Weight: Minimum weight of 500 pounds each and at least 50 percent of the stones, by volume, shall exceed 1,000 pounds each.

- C. Rip-Rap Stone: Sound, durable rock which will not disintegrate due to exposure to water or weather; angular in shape such as rough, unhewn quarry stone or fragments obtained by blasting, breaking or crushing natural rock.

Rounded boulders or cobbles will not be permitted.

Stone Weight: 10 pounds to 200 pounds, with approximately 50% of the stones weighing at least 50 pounds. Stones weighing more than 200 pounds may be used where practicable.

- D. Stone Ditch Protection: Sound, durable rock, which will not disintegrate due to exposure to water or weather; angular in shape such as rough, unhewn quarry stone or fragments obtained by blasting, breaking or crushing natural rock.

Rounded boulders or cobbles will not be permitted.

Stone size shall conform to a grain diameter of D50 = 6-inch, with a maximum stone size of 9-inch.

- E. Gravel Blanket: 6-inches of 1-1/2-inch crushed gravel blanket placed under and over filter fabric as shown on DRAWINGS. Sieve analysis by weight:

<u>Sieve Size</u>	<u>Max % Passing by Weight</u>
2"	100
No. 4	30-55
No. 200	0-10

F. Revegetation Mat: Provide Mirafi Miramat, or equal.

G. Mats and Nettings:

1. Wood Excelsior Blanket: Machine produced blanket of curled wood excelsior with 80% of the fibers being 6 inches or longer. The wood fibers shall be evenly distributed throughout the blanket and a covered with a photodegradable plastic mesh. Typical weight of 0.9 pounds per square yard. Curlex by American Excelsior, or approved equal.
2. Straw Blanket: A machine produced blanket consisting of 100% straw, with a polypropylene net on the top and bottom surfaces and sewn together with biodegradable thread. Typical weight of 0.5 pounds per square yard. S150 by North American Green, or approved equal.
3. Erosion Control Blanket Anchors: Wooden pegs or metal staples as recommended by the manufacturer for the installation of the erosion control blanket. The fasteners shall not be longer than 9 inches.

H. Mulches: Type and use as specified by the Erosion Control Handbook

1. Long fibered hay or straw in dry condition and which are relatively free of weeds and foreign matter detrimental to plant life.
2. Mulch binder: An asphalt emulsion mulch binder of type acceptable to the ENGINEER.
3. Mulch netting: Plastic or nylon mesh netting with approximate openings of 1/4" to 1"; or other netting approved by the ENGINEER.

I. Temporary Seed: Seed variety and applied rate are selected based upon the date of application, and as determined by the following table. Equivalent seed mixture based on its suitability for use in controlling erosion of the various soil types and slopes may be used as approved by the ENGINEER.

<u>Dates</u>	<u>Seed</u>	<u>Applied Rate</u>
4-1 to 7-1	Annual Ryegrass	0.9 lb/1000 ft <sup>2</sup>
8-15 to 9-15		
5-15 to 8-15	Sudan Grass	0.9 lb/1000 ft <sup>2</sup>
9-15 to 10-15	Winter Rye	2.6 lb/1000 ft <sup>2</sup>

- J. Sod:
  - 1. Grown from certified seed of adapted varieties to produce high quality sod free of any serious thatch, weeds, insects, diseases, and other pest problems.
  - 2. At least one year old and not older than three years. Cut with a 1/2 inch to 1 inch layer of soil.
- K. Drains:
  - 1. Flexible drains consisting of collapsible neoprene pipe, minimum 8 inch diameter.
  - 2. Corrugated metal pipe and inlet of a gauge consistent with the loading conditions, minimum 12 inch diameter.
- L. Polyethylene Liner: U.V. Resistant, minimum thickness 6 mils.
- M. Woven Filter Fabric: Provide Mirafi 600X woven textile or equal
- N. Non-Woven Fabric: Equal to Propex 4545 by Amoco Fabrics Co. or approved equal
- O. Siltation Fence: Mirafi Environfence, Amoco 1380 Silt Stop, or approved equal
- P. Hay Bale barrier: Rectangular shaped baled of hay or straw weighing at least 40 pounds per bale; free from noxious weed seeds and rough or woody materials

### **PART 3 – EXECUTION**

#### **3.01 TEMPORARY EROSION DEVICES**

- A. General: Provide the following devices to control erosion. Other devices require approval of the ENGINEER.
- B. Hay Bale Barrier: Provide temporary hay bale fence as shown on DRAWINGS and in ditches at 100' minimum intervals or where designated by the ENGINEER for erosion checks.
  - 1. Bales shall be placed in a row with ends tightly abutting the adjacent bales.
  - 2. Each bale shall be embedded in the soil a minimum of 4".
  - 3. Bales shall be securely anchored in place by stakes or re-bars driven through the bales. The first stake in each bale shall be angled toward previously laid bale to force bales together.

4. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

C. Silt Fence:

1. Install silt fence prior to any earthwork including grubbing.
2. Place where shown on Drawings or as directed by the ENGINEER. Install parallel to contours where possible, prior to site clearing and grading activities.
3. Bury lower edge of fabric at least 8 inches below ground surface to prevent underflow, as noted in the Erosion Control Handbook.
4. Curve ends of fence uphill to prevent flow around ends.
5. Inspect frequently; repair or replace any damaged sections.
6. Remove fence only when adequate grass catch has been established as determined by the ENGINEER.

D. Mulch:

1. Undertake immediately after each area has been properly prepared.
2. When seed for erosion control is sown prior to placing the mulch, place mulch on the seeded areas within 48 hours after seeding.
3. Apply mulch at 1.5 to 2.0 tons per acre. Mulch applied between the dates of December 1 through March 31 for winter stabilization shall be applied at 3.0 to 4.0 tons per acre.
4. Blowing chopped mulch will be permitted.
5. Hay mulch should cover the ground enough to shade it, but the mulch should not be so thick that a person standing cannot see ground through the mulch.
6. Remove matted mulch or bunches.

E. Temporary Erosion Control Matting:

1. Surface Preparation:
  - a. Conform to grades and cross sections for slopes and ditches shown on the Drawings.

- b. Finish to a smooth and even condition with all debris, roots, stones, and lumps raked out and removed.
  - c. Loosen soil surface to permit bedding of the matting.
  - d. Unless otherwise directed, apply seed prior to placement.
2. Installation:
- a. Place strips lengthwise in the direction of the flow of water.
  - b. Where strips are laid parallel or meet as in a tee, overlap at least 4 inches.
  - c. Overlap ends at least 6 inches in a shingle fashion.
  - d. The up-slope end of each strip of the matting shall be turned down and buried to a depth of not less than 6 inches with the soil firmly tamped against it.
  - e. The ENGINEER may require that any other edge exposed to more than normal flow of water be buried in a similar manner.
  - f. Build check slots at right angles to the direction of the flow of water. Space so that one check slot or one end occurs within each 50 feet of slope length. Construct by placing a tight fold of the matting at least 6 inches vertically into the ground, and tamp the same as up-slope ends.
  - g. Bury edges of matting around the edges of catch basins and other structures.
  - h. When ordered, additional seed shall be spread over matting, particularly at those locations disturbed by building the slots. Matting shall then be pressed onto the ground with a light lawn roller or by other satisfactory means.
  - i. Drive staples vertically into the ground flush with the surface.
  - j. On slopes flatter than 4:1, space staples not more than 3 feet and one row, alternately spaced, down the center.
  - k. On grades 4:1 or steeper, place staples in the same three rows, but spaced 2 feet apart.
  - l. On all overlapping or butting edges, double the number of staples, with the spacing halved; all ends of the matting and all required check slots shall likewise have staples spaced every foot.
- F. Temporary Seeding:
- 1. Seed with appropriate seeds and application rates from the table in paragraph 2.01I of this Section. Seed shall be sown at the rate indicated, on the pure live seed basis.

2. Mulch areas where temporary seeding has been applied. Do not mulch seeded areas where matting will be immediately installed.
  3. If temporary seeding does not achieve adequate growth by December 1, an additional layer of mulch shall be applied at that time.
- G. Topsoil Storage:
1. Topsoil which is stockpiled on the site for use in loam applications shall be placed out of natural drainages, in piles not more than 8 feet in height, which have side slopes of 2:1 to 1.5:1.
  2. A trench, depth as required, shall be constructed around the base of the pile to prevent eroding soil from washing into drainages.
  3. Any topsoil piles, which are to remain for a period of 1 month or more, shall be covered with temporary seed and mulch immediately following stockpiling.
- H. Temporary berms: Construct temporary barriers along the toe of embankments using side drains as required.
- I. Temporary slope drains: Collapsible pipe with corrugated metal pipe inlet.
- J. Sedimentation basins: Construct sedimentation basins adequate to avoid siltation of streams and rivers.
- K. Sediment Traps: Construct sediment traps in runoff ditches, using hay bale fence, @ a min. of 100' intervals or as required.

### **3.02 REMOVAL OF TEMPORARY EROSION CONTROL**

- A. Remove temporary materials and devices when permanent soil stabilization has been achieved. Re-use materials in good condition if approved by the ENGINEER.
- B. Remove unsuitable materials from site and dispose of in a legal manner.

### **3.03 SUBGRADE PREPARATION**

- A. Grade and compact, where possible, areas to receive protection to a uniform slope. Allow for depth of protection stone layer.
- B. Footing trench: Excavate trench across toe of slope as shown on the DRAWINGS for rip-rap.

### **3.04 SILTER FABRIC PLACEMENT**

- A. General: Place filter fabric under the rip-rap, or stone ditch protection as shown on the DRAWINGS. Filter fabric is to be placed in one continuous piece. Sew all seams as per manufacturer's recommendation.

### **3.05 RIP-RAP PLACEMENT**

- A. General: Place required rip-rap to full depth shown on DRAWINGS in one operation without special handwork, measured perpendicular to the face of the slope to obtain a uniform appearance true to line and grade. Place larger stones at bottom of slope. Place stones in close contact, with interlocking of face stones and backing stones. Fill openings between stones with smaller rocks or coarse gravel.

### **3.06 MAINTENANCE**

- A. Inspect erosion control practices immediately after each rainfall and at least daily during prolonged rainfall or snowmelt for damage. Provide maintenance and make appropriate repairs or replacement at no additional cost to the OWNER, until Project acceptance or as required to comply with maintenance requirements if longer.
- B. Remove silt from silt fence when it has reached one foot above grade or prior to expected heavy runoff or siltation.
- C. Repair matting if any staples become loosened or raised, or if any matting becomes loose, torn, or undermined, make satisfactory repairs immediately.

**END OF SECTION**

## SECTION 31 40 00

### SHORING & BRACING

#### PART 1 – GENERAL

##### 1.01 DESCRIPTION OF WORK

- A. Work included:
  - 1. Shoring and bracing necessary to protect existing buildings, utilities, and other improvements and to prevent excavation against caving due to unstable soils, and to meet OSHA safety requirements of shoring and bracing.
  - 2. Removal of bracing, as required.
- B. Shoring and bracing systems include, but are not limited to, the following:
  - 1. Moveable box
- C. Movable box: Provide where a shoring system is required but sheet piling is not called for. Payment of movable box system is incidental to other Work items.
- D. Related Work
  - 1. Section 31 20 00 – Earthwork

##### 1.02 QUALITY ASSURANCE

- A. Design: Assign design of shoring and bracing to a registered Professional Engineer.
- B. Regulations: Comply with local codes and OSHA requirements.

##### 1.03 JOB CONDITIONS

- A. Before starting Work, check and verify governing dimensions and elevations. Survey condition of adjoining properties with ENGINEER. Take photographs, recording any prior settlement or cracking of structures, pavements, and other improvements. Prepare a list of such damages, verified by dated photographs, and signed by CONTRACTOR, ENGINEER and others conducting the investigation.
- B. Survey adjacent structures and improvements, establishing exact elevations at fixed points to act as benchmarks. Clearly identify benchmarks and record existing elevations. Locate datum level used to establish benchmark elevations sufficiently distant so as not to be affected by excavation operations.

- C. During excavation, resurvey benchmarks weekly, employing licensed Land Surveyor or registered Professional Engineer. Maintain accurate log of surveyed elevations for comparison with original elevations. Notify ENGINEER if changes in elevations occur or if cracks, sags or other damage is evident.

## **PART 2 – PRODUCTS**

### **2.01 MATERIALS**

- A. General: Provide suitable shoring and bracing materials which will support loads imposed. Materials need not be new, but should be in serviceable condition.
- B. Steel sheet piling and shapes (corners, etc.): Continuous interlocking type; section modules and type of section as required by design
- C. Bracing members: Wood timbers or A36 steel members
- D. Bolts: ASTM A307

## **PART 3 – EXECUTION**

### **3.01 GENERAL**

- A. Provide system to resist earth and hydrostatic pressures, including surcharges from surface loads.
- B. Locate shoring and bracing to clear permanent construction and to permit forming and finishing of concrete.
- C. Maintain shoring and bracing while excavation is open.
- D. Removal of systems: Remove systems in stages to prevent disturbance of soils and damage to structures and improvements. Fill voids as soon as sheeting is withdrawn.

### **3.02 STEEL SHEET PILING AND BRACING**

- A. Drive sheet piling prior to excavation where possible. Fill and compact voids outside sheeting to hold sides of excavation in place.
- B. Brace as required to prevent distortion of piling and other bracing members. If necessary to move a brace, install new bracing prior to removal of original brace.
- C. Cut off sheet piling to be left in place at least two feet below finish grade.

**END OF SECTION**

## SECTION 33 11 00

### WATER DISTRIBUTION PIPING

#### PART 1 – GENERAL

##### 1.01 DESCRIPTION OF WORK

- A. Water distribution piping includes
  - 1. Supply and installation of all distribution piping as noted on the Drawings.
  - 2. Location of existing utilities prior to construction.
  - 3. Repair of water piping damaged during construction.
  - 4. Supply and installation of all valving, and accessories.
  - 5. Supply and installation of new hydrants, as noted on the Drawings.
  - 6. Flushing, testing and disinfection.
  - 7. Supply and installation of temporary water where noted and required to ensure uninterrupted service.

##### 1.02 RELATED WORK

- A. Section 31 20 00 – Earthwork

##### 1.03 QUALITY ASSURANCE

- A. Code Compliance: Comply with State Plumbing Code and local plumbing codes where more stringent. Comply with Maine Department of Human Services, Division of Health Engineering rules.
- B. AWWA Standards: Comply with requirements of Section 4 of AWWA C601, "Preventive Measures During Construction" for cleanliness.
- C. Testing: CONTRACTOR shall pay for all flushing, pressure, leakage and bacteriological testing, disinfection, and fire flow testing.
- D. Acceptable Manufacturers: Only products manufactured in North America will be permitted for use on this project.
- E. Certifications
  - 1. All products in contact with potable water shall be ANSI/NSF Standard 61 certified.

## 1.04 SUBMITTALS

- A. Submit manufacturer's product data and installation instructions for each product specified for water service piping.

## PART 2 – PRODUCTS

### 2.01 PRESSURE PIPE

- A. General: Provide fittings and other required piping accessories of same type and class of material as conduit, or of material having equal or superior physical and chemical properties.
- B. Copper Tube: Type K conforming to ASTM B88, with compression fittings conforming to ANSI/AWWA C800 as manufactured by Mueller or equal approved by OWNER.
- C. Ductile Iron Pipe: Push-on joints, AWWA C111, unless indicated otherwise, centrifugally cast bituminous-coated, double cement-lined (AWWA C104), seal-coated and manufactured in accordance with the latest revision of AWWA Standards C150 and C151. Pipe shall be Class 52 for all piping unless indicated otherwise. Weight, class, manufacturer's mark, year of production, and "DI" or "Ductile" shall be cast or stamped on the pipe. Only 5% of the pipe may be less than the standard manufacturer's length.
- D. HDPE Pipe: High Density Polyethylene Pipe meeting AWWA C906 equal to Bluestripe NSF by Plexco shall be used for temporary water. Material shall be PE 3408 HDPE. Provide transition couplings and stiffeners as recommended by pipe manufactures.
- E. Pipe Couplings: Sleeve shall be ductile iron ASTM A536, and shall have smooth inside taper for uniform gasket seating. Gasket shall be grade 30. Follower flanges shall be ductile cast iron ASTM A536. Bolts shall be high strength low alloy steel with heavy, semi-finished hexagon nuts to ANSI/AWWA C111/A21.11 standards. OD range shall be approved by the Ellsworth Water Department. Ford coupling, Smith-Blair coupling, or equal approved by OWNER.
- F. Pipe Fittings: Pipe fittings shall have mechanical joint ends conforming to ANSI/AWWA C1/A21.11, double cement lining and bituminous coating conforming to ANSI/AWWA C104.A21.4 or fusion bonded epoxy coat (6-8 mil nominal thickness) conforming to ANSI/AWWA C550 & C116/A21.16.

Fittings shall be supplied with mechanical joint accessories unless specified others, with high strength low alloy steel bolts and heavy hexagon nuts conforming to ANSI/AWWA C111.A21.11.

Long body fittings shall be Class 350 ductile iron conforming to ANSI/AWWA C110/A21.10.

Fittings conforming to ANSI/AWWA C153/A21.53 will not be allowed.

- G. Repair Sleeves (for Repair of Existing Mains): Shall have single band of 304 stainless steel with malleable iron ASTM A47 grade 32510 lungs, grade 30 gasket and high strength low alloy steel bolts with heavy semi-finished hexagon nuts conforming to AWWA/ANSI C111.A.21.11 or 3904 stainless steel bolts and nuts as manufactured by Smith-Blair 226 or approved equal.

## 2.02 VALVES, FITTING, CLAMPS, ETC.

- A. General: All products used in the construction that come in contact with drinking water shall meet the National Sanitation Foundation Standard 61 for Drinking Water System Components – Health Effects. The products and/or materials covered include, but are not limited to, protective materials (coatings, linings, liners, etc.), joining and sealing materials (solvent cements, welding materials, gaskets, etc.), and mechanical devices used in transmission/distribution systems, (valves, etc.).

Miscellaneous brass goods shall be 125 lbs., red brass with iron pipe threads when used for connecting water services. Items included are bushings, couplings, elbows, nipples, plugs, and tees. Manufactured by Mueller, or equal approved by OWNER.

- B. Fittings: All fittings shall be MJ Class 350 ductile iron and shall comply with AWWA C-153, AWWA C-111 and shall be cement lined as per AWWA C-104. All bolts for MJ fittings shall be Corten. Hydrant tees shall be MJ anchoring tees.
- C. Valves: Valves shall be epoxy coated and supplied with mechanical joint accessories, high strength alloy steel bolts and heavy hexagon nuts conforming to ANSI/AWWA C111.A21.11.

Valve seal plate and bonnet shall have either all silicone bronze or 316 stainless steel bolts and nuts.

Gate Valve: Shall be 200 psi working pressure, non-rising stem, "O" ring, open right, mechanical joint, two-inch ductile iron operating nut with stainless steel bolt, either compound slide wedge mechanism metropolitan design conforming to ANSI/AWWA C500 or resilient seated gate valve conforming to ANSI/AWWA C509, manufactured by American Flow Control Series 2500, Mueller A 2360, or equal approved by OWNER.

- D. Corporation Stops: 3/4-inch and 1-inch shall be brass, ball valve type construction with inlet CC thread and compression pack joint on the outlet, heavy patterns, and conforming to AWWA/ANSI C800.

1 1/2-inch and 2-inch shall be brass with inlet iron pipe thread and compression pack joint on the outlet, heavy patterns, and conforming to AWWA/ANSI C800.

Manufactured by Ford, Mueller, or equal approved by OWNER.

- E. Curb Stop: Shall be brass, ball valve type, or approved equal with compression pack joints on either end and 24-inch stainless steel rod. Open left, no drain, heavy patterns, and conforming to AWWA/ANSI C800.  
  
Manufactured by Ford or equal approved by OWNER.
- F. Duc Lug and Tie Bolts: Tie bolts with hexagonal nuts shall be Star Supply Corp. or approved equal.  
  
Duc lug bolts shall be Star Supply Corp. or approved equal.
- G. Repair Clamps: Equal to Ford all stainless steel clamps, 2" – 12" diameter; brass, CPPJ - CPPJ, 3/4" - 2" diameter.
- H. Mechanical Joint Restraints: All fittings, exclusive of hydrants, shall include mechanical joint restraints, "Grip Ring", "Megalug", or approved equal.
- I. Repair Couplings: Equal to Rockwell cast couplings, 2" – 12" diameter; brass, CPPJ - CPPJ, 3/4" - 2" diameter.
- J. Valve Boxes: Shall be cast iron, manufactured in North America, two piece, sliding type with a top-flanged top section, no inside stops, and an outside shaft diameter of six inches. Bottom section shall be belled base. Length of top section shall be minimum of 24 inches. Middle and bottom section length as needed. Boxes shall have the word "WATER" clearly cast into the cover.
- K. Valve Box Wrench: Provide one 8-foot long valve box wrench for 2-inch square gate valve nut.
- L. Couplings: Solid sleeve MJ couplings or approved equal.

### 2.03 ACCESSORIES

- A. General: Provide anchorages for tees, plugs, and caps. After installation, apply a full coat of asphalt or other acceptable corrosion-retarding material to surfaces of rods and clamps.
- B. Clamps, Straps and Washers: Steel, meeting or exceeding all requirements of the latest revision of ANSI/ASTM A506.
- C. Rods: Stainless steel, meeting or exceeding all requirements of the latest revision of ANSI/ASTM A575.
- D. Rod Couplings: Malleable iron, meeting or exceeding all requirements of the latest revision of ANSI/ASTM A197.
- E. Cast Iron Washers: Meeting or exceeding all requirements of the latest revision of ANSI/ASTM A126, Class A.

- F. Thrust Blocks: Shall be 3000 psi concrete, size as shown on Drawings.
- G. Pipe Lubricant: Suitable for use in potable water supply.
- H. Trench Insulation: Shall be polystyrene foam insulation board equal to Styrofoam SM brand as manufactured by the Dow Chemical Co. or approved equal. Average compressive strength shall equal 40 psi with minimum of 25 psi.

## 2.04 HYDRANTS

- A. General: All materials used in the production of fire hydrants for ordinary service shall conform to the specifications designated for each material listed in AWWA Standard C502. All hydrants shall be Mueller Super Centurion, Clow Eddy, or equal approved by the OWNER.
  - 1. Traffic type at ground line
  - 2. 6' meter bury
  - 3. 6" mechanical joint
  - 4. 5 1/4" valve opening – valve to open right (clockwise)
  - 5. 2 – 2 1/2" NST hose nozzles
  - 6. 1 – 4 1/2" NST steamer nozzle
  - 7. 1 15/16" nozzle cap nut
  - 8. 1 15/16" operating nut – pentagon shape
  - 9. 6" minimum inside barrel diameter
  - 10. Without drain
  - 11. All nuts and bolts below grade shall be Type 18 – 8 stainless steel attached by the manufacturer at the factory.

## PART 3 – EXECUTION

### 3.01 INSTALLATION

- A. General: Install products in compliance with manufacturer's instructions. Provide restrained joints and thrust blocks at all fittings as detailed on the Drawings. Install all pipes in the dry. Prevent introduction of any groundwater or foreign materials into pipe during construction. Provide watertight plug in ends of pipe at all times when construction is not in progress. Coordinate all work with the Ellsworth Water Department. Existing water mains shall remain active at all times. CONTRACTOR

shall coordinate connection of existing services to the new water main with Ellsworth Water Department.

- B. Excavation: In general, pipe is to be laid at a depth that would be equal to installing the pipe with a depth of cover as outlined on the Drawings. Where existing or proposed pipes, conduits, culverts, cables, wires, etc. interfere with laying at this depth, the water pipe shall be laid at greater depth to clear the obstruction by at least eighteen (18) inches, where practical. Excavation shall be kept free of water and special precautions shall be taken to prevent entry of water, mud or other foreign substances into the line. Temporary caps shall be installed over all openings at the end of each day, when the work is suspended for period of 30 minutes or more (including lunch hours), or whenever necessary to protect the work in progress. Pipes shall be carefully lowered into the excavation, be guided into proper position, and joined to the preceding length or fitting. Suitable excavated material (i.e. free of stones and capable of being properly compacted) or borrow shall be placed and tamped under and around the pipe, taking care to maintain equal depth on both sides and to prevent movement of the pipe from its proper alignment. Where directed by the ENGINEER, due to soft or otherwise unsuitable bottom conditions, pipe bedding shall be placed in accordance with the crushed stone.

All pavements to be removed shall be sawn or uniformly trimmed (for concrete) at the pavement excavation pay limits prior to excavation unless otherwise approved by the ENGINEER.

The CONTRACTOR shall note that in some areas underground sewer mains and services, storm drains, telephone or communications cables, gas lines, and other below-ground utilities may exist in close proximity to the work. Effort has been made to indicate on the plans the approximate location of such utilities but this information is not guaranteed either as to accuracy or completeness. It shall be the CONTRACTOR's responsibility to make a closer determination of the presence and location of all utilities known or suspected to be in close proximity to the work.

Excavation around other utilities, pipes, culverts, and similar installations shall be done with extreme care. It shall be the CONTRACTOR's responsibility to contact the OWNER/operator of each utility to be encountered and obtain information relative to location and depth before excavating in the area. The CONTRACTOR shall promptly notify the Utility OWNER concerned in the event of damage occurring during construction, whether caused by him or others.

In the event that underground utilities conflict with the location of the work, the CONTRACTOR shall promptly notify the ENGINEER and shall not disturb the conflicting utility until given specified instruction specifying the action to be taken.

Private utility (building drains, etc.) encountered in the work shall be brought to the attention of the ENGINEER and be handled in such manner as he directs.

Property owner's whose driveways will be blocked for a short period of time will be notified 24 hours in advance of the excavation so that vehicles can be removed when

necessary. Driveway shall not be blocked at night without the expressed consent of the property owner.

- C. Preparation of Water Line Trench Bottom: Pipe shall be laid directly on trench bedding containing coupling holes and shaped to provide continuous contact for the pipe barrel between coupling holes.
- D. Bedding of Pipe: Buried ductile iron pipe shall be laid in accordance with AWWA C600 at the depth shown on the Drawings. At bell ends, holes shall be provided so that pipe lays flat on trench bedding. Refer to trench detail on Drawings.
- E. Cutting Pipe: All cutting of iron pipe shall be done using an electrically, pneumatically, or gasoline operated machine. Blades shall be carbide tipped for cutting cement-lined iron pipe or abrasive type for proper material being cut. The machine used shall be portable saw equal to those made by Fein, Wache, or Homelite. When the cut end is to be used as a "Bell-Tite" or "Tyton" joint, it shall be tapered back on the outside of the cut about 1/8-inch, at an angle of about 30 degrees with the pipe center. This shall be done with a course file or portable grinder.
- F. Connection to Existing Water Main: The CONTRACTOR shall locate and confirm sizes and materials of existing mains, excavate, cut out a section of existing main, install a tee, pipe, couplings and a valve, and backfill the excavation. The CONTRACTOR shall provide all materials, including mechanical joint accessories, valve boxes, and other items necessary to make all joints watertight and provide complete and effective connections to existing water mains. Existing water main shall remain active at all times.
- G. Cleaning: Clear interior of pipe of dirt and other superfluous material as work progresses. Place plugs in end of uncompleted pipe whenever work stops.
- H. Coordinate connections to existing water mains with the OWNER of the water mains. Provide 48 hours notice prior to such work. The CONTRACTOR is responsible for the cost and all work associated with connection to existing mains unless otherwise noted.

### 3.02 FLUSHING

- A. General: At completion of water service installation, flush and disinfect in conformance with AWWA C651. Prevent contaminated or highly chlorinated water from entering new or previously disinfected mains.
- B. Flushing and Draining: Flush using water from existing main. CONTRACTOR shall provide all water needed. Provide a minimum flushing velocity within the pipe of 2.5 feet per second. CONTRACTOR to dispose of all water flushed from mains in accordance with applicable laws and regulations.

### 3.03 TESTING

- A. CONTRACTOR to provide all labor, equipment, material, gauges, pumps, etc. to test for leaks in accordance with AWWA Standard C600 as follows:
1. Test newly laid pipe and valved sections at hydrostatic pressure of 150 pounds per square inch.
    - a. Test pressure: System shall be tested at a hydrostatic test pressure of one-hundred fifty (150) pounds per square inch.
    - b. Test pressure: Not to exceed pipe or thrust restraint design pressures.
    - c. Test duration: 2 hours, minimum.
    - d. Pressure variation tolerance: less than +5 psi.
    - e. Test pressure not to exceed valve or hydrant pressure ratings on sections including closed valves or hydrants.
  2. Pressurization of Pipe:
    - a. Fill each valved pipe section slowly with water at specified test pressure.
    - b. Apply by means of pump or other approved method.
  3. Air Removal:
    - a. Expel all air from pipe, valves, and hydrants before applying test pressure.
    - b. Install corporation stops at high point to vent air if no release valves available.
    - c. After air removal close stops and apply test pressure.
    - d. After test, remove stops and plug holes or leave stops in place permanently if directed by ENGINEER.
  4. Examination
    - a. Examine exposed pipe, fittings, valves, hydrants, and joints during test.
    - b. Repair or replace defective appurtenances discovered during test.
  5. Leakage Test:
    - a. Leakage: Quantity of water supplied to pipe test section to maintain pressure within +.35 kg/cm<sup>2</sup>.
    - b. Leakage shall not exceed the following limits:

$$L = \frac{SD\sqrt{P}}{133,200}$$

L = allowable leakage, in gallons per hour (gph)  
S = length of pipe tested in feet  
D = nominal pipe diameter, in inches  
P = average pressure during test, in pounds per square inch (gauge)

- c. When testing against closed metal-seated valves, an additional leakage per closed valve of 0.0078 gph/inch of nominal valve size shall be allowed.
  - d. Repair visible leaks regardless of leakage amount.
  - e. If failing leakage tests:
    - 1) Locate and correct leak.
    - 2) Repeat leakage test until passing test attained.
- B. OWNER to perform operational testing of valves by opening and closing under water pressure to insure proper operation.

### 3.04 WATER MAIN DISINFECTION

- A. Provide injection tap at one end of the new water main and a sampling/flushing tap at the other end. Provide water pumps with adequate metering devices. Provide chlorine injection pumps or chlorinators which allow accurate measurement of chlorine being introduced to water service.
- B. Personnel: Submit names of personnel or firm to perform disinfection work.
- C. Disinfection Method: Disinfection shall be done using continuous feed method of chlorination as specified in AWWA C651 "Disinfecting Water Mains" as follows:
  - 1. Water supplied from a temporary, backflow-protected connection to the existing distribution system or other approved supply source shall flow at a constant, measured rate into the newly installed water main. In the absence of a meter, the rate may be approximated using a Pitot gauge in the discharge, measuring the time to fill a container of known volume, or measuring the trajectory of the discharge and using the formula shown in Figure 2 of AWWA C651.
  - 2. At a point no more than 3 meters downstream from the beginning of the new main, water entering the new main shall receive a dose of chlorine fed at a constant rate such that the water will have not less than 25 mg/L free chlorine. To ensure that this concentration is provided, measure the chlorine concentration at regular intervals in accordance with the procedures described in the current edition of Standard Methods for the Examination of Water and Wastewater or AWWA Manual M12, or using appropriate chlorine test kits.
  - 3. Chlorine application shall not cease until the entire main is filled with heavily chlorinated water. The chlorinated water shall be retained in the main for at

least 24 hours, during which time all valves and hydrants in the treated section shall be operated to ensure disinfection of the appurtenances. At the end of this 24-hour period, the treated water in all portions of the main shall have a residual of not less than 10 mg/L of free chlorine.

- D. Final Flushing: Following disinfection, final flushing shall be done as specified in Section 4.5 of AWWA C651 as follows:
1. After the 24-hour retention period, heavily chlorinated water should not remain in prolonged contact with pipe. In order to prevent damage to the pipe lining or to prevent corrosion damage to the pipe itself, the heavily chlorinated water shall be flushed from the main until chlorine measurements show that the concentration in the water leaving the main is no higher than that generally prevailing in the distribution system or that is acceptable for domestic use.
  2. The ENGINEER shall inspect the environment to which the chlorinated water is to be discharged. If there is any possibility that the chlorinated discharge will cause damage to the environment, then a neutralizing chemical shall be applied to the water to be wasted by CONTRACTOR to neutralize thoroughly the residual chlorine.
- E. Bacteriological Testing: Following disinfection and final flushing, bacteriological testing shall be done as specified in Section 5 of AWWA C651 as follows:
1. After final flushing and before the new water main is connected to the distribution system, two consecutive sets of acceptable samples, taken at least 24 hours apart, shall be collected from the new main. At least one set of samples shall be collected from every 1,200 feet of the new water main, plus one set from the end of the line and at least one set from each branch.
  2. All samples shall be tested for bacteriological quality in accordance with Standard Methods for the Examination of Water and Wastewater, and shall show the absence of coliform organisms.
  3. If the initial disinfection fails to produce satisfactory bacteriological results, the new main shall be re-flushed and re-sampled. If check samples also fail to produce acceptable results, the main shall be re-chlorinated by the continuous-feed or slug method until satisfactory results are obtained.

**END OF SECTION**

## SECTION 33 31 00

### SEWERS AND DRAINS

#### PART 1 – GENERAL

##### 1.01 DESCRIPTION OF WORK

- A. Provide new sanitary sewer and storm drain system where specified on the plans. This section includes:
  - 1. Sanitary Sewer Main
  - 2. Services
- B. Related Work
  - 1. Section 31 20 00 – Earthwork

##### 1.02 QUALITY ASSURANCE

- A. Remove damaged pipe from job site.
- B. Comply with the following:
  - 1. City of Ellsworth Ordinances

##### 1.03 SUBMITTALS

- A. Manufacturer's product data and installation instructions.
- B. Certified copies of tests on pipe units.
- C. Construction Records: Record depth and location of the following:
  - 1. Repairs to existing pipes.
  - 2. Sewers and manholes.
- D. Record neatly in a permanently bound notebook and submit at Substantial Completion. Provide access to records for ENGINEER at all times. Submit copies to ENGINEER on a weekly basis.

#### PART 2 – PRODUCTS

##### 2.01 PIPE AND FITTINGS

- A. General: Provide fittings of same type and class of materials as pipe. Provide commercially manufactured wyes or tees for service connections. Fitting must have single piece gasket.

- B. PVC Non-Pressure Pipe:
  - 1. 4", 6", 8" and 10": ASTM D3034 or ASTM D3033, strength requirement SDR 35, push-on joints ASTM D3212, gaskets ASTM F-477.
- C. PVC Pressure Pipe
  - 1. 1" to 8": Pipe shall be High Density Polyethylene (HDPE) DR 11 PE 3408 pipe with Ductile Iron O.D equal to Bluestripe. Pipe and fittings shall conform to the requirements of AWWA C906. Provide transition couplings and stiffeners as recommended by pipe manufacturers.
  - 2. 10": Pipe shall be Class 160 PVC. Pipe and fittings shall conform to the requirements of ASTM D2241. PVC resin compound shall conform to ASTM D1784 and rubber gaskets shall conform to ASTM D1869 and F477. Pipe shall be 20' nominal lengths. Provide transition couplings and stiffeners as recommended by pipe manufacturers.

## 2.02 MISCELLANEOUS

- A. Flexible Adapters
  - 1. Type A: Neoprene sleeve with stainless steel bands equal to those manufactured by Fernco.
  - 2. Type B: Equal to Rockwell cast couplings.
- B. Pipe Supports (within structures): Saddle type, steel, painted, adjustable equal to ITT Grinnell.
- C. Marking Tape: Equal to Lineguard III by Tri-Sales, Inc., 2" wide, green; detectable with magnetic locators.
- D. Mechanical Water Stop: Equal to Ripley's Dam by Macrip Inc., Durham, NH.
- E. Thrust Blocks: 2000 psi (min.) cast-in-place concrete; use either bagged Premix equal to Sakrete products or premix from concrete truck.
- F. Backwater Valve: Schedule 40 PVC, solvent weld joint, as supplied by Portland Plastic Pipe or equal.

## PART 3 – EXECUTION

### 3.01 INSTALLATION OF GRAVITY PIPE AND FITTINGS

- A. Methods: Install in accordance with manufacturer's recommendations. Use a laser beam for line and grade unless otherwise permitted by the ENGINEER. Secure each length of pipe with bedding before placing next length. Plug open ends when

Work is suspended. Bed pipe as shown on Drawings. A 30-inch minimum cover over the top of PVC pipe should be provided before the trench is wheel-loaded.

- B. Grade and line: Lay pipe to line and grade shown on the Drawings. If grade is not shown, determine elevations of start and finish points for each run of pipe. Lay pipe to a uniform grade between these points.

Line and grade may be adjusted by the ENGINEER as required by field conditions.

Install a mechanical water stop every 10 vertical feet of elevation changing on the sewer mains.

- C. Conditions: Lay pipe in the dry. Do not use installed pipe to remove water from work area.
- D. Flush all pipe and remove debris. Flushing method approved by ENGINEER. Gravity flushing is not acceptable.
- E. Connections to manholes and catch basins: Provide short length of pipe so that joints are located within 3 feet of inside surface of manholes and catch basins for other than PVC pipe.
- F. House service fittings and leads: Size of service leads 4" and 6" unless otherwise indicated.

Depth and location of service to match existing unless otherwise noted by ENGINEER in field.

Provide tee/wye or wye fittings on main line pipe. Extend services to property line.

Plug or cap and stake ends of new service. Provide stake which extends from plug or cap to 1 foot above ground surface. Assist ENGINEER in measurement of pipe installed and in obtaining swing ties to ends of leads.

- G. Precast Sewer Chimneys: Install per manufacturer's instructions. Manufacturer's representative to provide one day site visit to assist and instruct in proper installation of his product.
- H. Backwater Valve: Adapt solvent weld pipe connection to push-on pipe with Type A flexible adapter.

### 3.02 INSTALLATION OF FORCE MAIN PIPE AND FITTINGS

- A. Install force main pressure piping in accordance with the manufacturer's recommendations and the details as shown on the Drawings. Installation of HDPE pressure pipe "Type (PE/4) shall conform to the Plastic Pipe Institute (PPI) Handbook of PE Pipe and the manufacturer's recommendations. Thermal butt fusion or electro-fusion methods are acceptable provided the Contractor has submitted evidence of training by a manufacturer's representative.

- B. Lay pipe to line and grade shown on the Drawings. Do not allow positive-negative grade discontinuities. Line and grade may be adjusted by the Engineer as required by field conditions.
- C. Flush all piping and remove all debris. Flushing method used shall be approved by the Engineer. Gravity flushing shall not be acceptable. Provide all labor, water, pumps and related appurtenances for pipe flushing.
- D. Lay pipe in the dry. Do not use installed pipe to remove water from work area.
- E. Install warning tape continuously from pumping stations to the end of each force main. At ends of rolls and repairs, splice tape with 3 foot overlap connected with tape. Provide the Owner with one full roll for future repairs. Extend to grade at each access manhole and at pump stations.
- F. Provide thrust protection via concrete thrust blocks at all bends in force main pressure piping systems in accordance with the Drawings.

### **3.03 UTILITIES TO BE ABANDONED**

- A. Close open ends of abandoned underground utilities which are not indicated to be removed. Provide sufficiently strong closures acceptable to ENGINEER's to withstand hydro-static or earth pressure which may result after ends of abandoned utilities have been closed.

### **3.04 INSULATION**

- A. Install as shown on Drawings.
- B. Provide 4-inch minimum, compacted sand layers directly above and below insulation.

### **3.05 TESTING OF SANITARY SEWERS**

- A. General: Test all sanitary sewer pipes after backfilling. Install all house service leads on main line before testing. Perform tests in presence of ENGINEER.  
  
A maximum of 1000 feet of pipe may be installed but not tested at any time.
- B. Gravity Sewer - Leakage Tests: Use low pressure air test as follows:
  - 1. Plug ends of section to be tested.
  - 2. Supply air slowly to the pipe to be tested until the air pressure inside the pipe is 4.0 psi greater than the average back pressure of any groundwater submerging the pipe.
  - 3. Disconnect air supply and allow a minimum of two minutes for stabilization of pressure.

4. Following stabilization period measure drop in pressure over a 6 minute test period.
  5. Acceptable drop: No more than 1.0 psi.
- C. Deflection Test for PVC Gravity Sewer Pipe: Test 100% of pipe with "GO-NO-GO" gauge allowing a 5% maximum deflection.
- D. Special Testing for Gravity Sewer Replacing Existing Sewer: For all new sewer replacing existing sewer and requiring the immediate tie-in of existing services, provide sewer TV inspection and joint testing services per NASSCO specifications. Provide VHS copy of tape to ENGINEER upon completion of testing: Provide TV work during low flow periods (1:00 a.m. - 4:00 a.m.).
- E. Force Main Tests: Use hydrostatic test as follows:
1. Fill section of pipe with water and expel all air.
  2. Pressurize to 1 1/2 times normal operating pressure but not less than 60 psi.
  3. Measure leakage over a 2-hour test period.
  4. Acceptable leakage: Less than 10 gallons per day per inch diameter per mile of pipe tested.
- F. Repair all pipes not passing tests using materials and methods approved by the ENGINEER, and retest.

**END OF SECTION**

## STANDARD DETAIL UPDATES

Standard Details and Standard Detail updates are available at:  
<http://maine.gov/mdot/contractors/publications/standarddetail/>

<b><u>Detail #</u></b>	<b><u>Description</u></b>	<b><u>Revision Date</u></b>
501(02)	Pipe Pile Splice	3/05/2015
501(03)	H – Pile Splice	3/05/2015
504(07)	Diaphragm & Crossframe Notes	10/13/2015
507(13)	Steel Bridge Railing	6/03/2015
507(14)	Steel Bridge Railing	6/03/2015
507(31)	Barrier – Mounted Steel Bridge	8/06/2015
526(02)	Temporary Concrete Barrier	8/06/2015

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

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

101.2 Definitions

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

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

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

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

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

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

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

104.4.4 Coordination of Road Closure / Bridge Closure / Bridge Width Restrictions

Revise the last sentence by adding a period after ‘Resident’; remove the “and” after Resident; and adding “**not covered by Pay Items**” between ‘costs’ and ‘will’. So that the last paragraph reads “**All Newspaper notices, radio announcements and any notifications will be subject to the approval of the Resident. All costs not covered by Pay Items will be considered incidental to the Contract.**”.

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

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

## SECTION 105 GENERAL SCOPE OF WORK

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

**“105.4.5 Maintenance of Existing Structures When a new Bridge or Minor Span is being installed on a new alignment and the existing structure is to remain in service, the Department will maintain the existing structure and the portions of the roadway required for maintaining traffic until such time that the new structure is opened to traffic and the existing structure is taken out of service. A similar situation exists when a new Bridge or Minor Span is being installed on the same alignment as the existing structure, requiring a temporary detour to be installed by the Contractor per Section 510, Special Detours, prior to removal of the existing structure. In this case, the Department will maintain the existing structure and the portions of the existing roadway required for maintaining traffic until such time that either the temporary detour is opened to traffic or the Contractor begins any work on the existing structure, including, but not limited to, repairs, modifications, moving, demolition or removal. In either case, once the new structure or temporary detour is opened to traffic, or the Contractor begins any work on the existing structure, the Contractor shall be solely responsible for all maintenance of the existing structure and the portions of the existing approaches that lie outside the new roadway or the temporary detour, respectively. This specification is not intended to supersede Standard Specification Section 104.3.11, Responsibility for Property of Others.”**

105.6.2.4 Department Verification Add the following to the end of the first sentence:  
**“or other approved method, such as reference staking, to allow the Department to independently verify the accuracy of the work, as approved by the Department.”**

## SECTION 106 QUALITY

106.4.1 General - In the first sentence, remove “When required by Special Provision,” and replace with **“When required elsewhere in the Contract, ”**

## SECTION 108 PAYMENT

108.3 Retainage - Remove the paragraph beginning with “ The Contractor may withdraw...” in its entirety.

108.4.1 Price Adjustment for Hot Mix Asphalt:  
Remove this section in its entirety and replace with the following

**For all contracts with hot mix asphalt in excess of 500 tons total, a price adjustment for performance graded binder will be made for the following pay items:**

<b>Item 403.102</b>	<b>Hot Mix Asphalt – Special Areas</b>
<b>Item 403.206</b>	<b>Hot Mix Asphalt - 25 mm</b>

Item 403.207	Hot Mix Asphalt - 19 mm
Item 403.2071	Hot Mix Asphalt - 19 mm (Polymer Modified)
Item 403.2072	Hot Mix Asphalt - 19 mm (Asphalt Rich Base)
Item 403.208	Hot Mix Asphalt - 12.5 mm
Item 403.2081	Hot Mix Asphalt - 12.5 mm (Polymer Modified)
Item 403.209	Hot Mix Asphalt - 9.5 mm (sidewalks, drives, & incidentals)
Item 403.210	Hot Mix Asphalt - 9.5 mm
Item 403.2101	Hot Mix Asphalt - 9.5 mm (Polymer Modified)
Item 403.2102	Hot Mix Asphalt - 9.5 mm (Asphalt Rich Base)
Item 403.2104	Hot Mix Asphalt - 9.5 mm (Thin Lift Surface Treatment)
Item 403.21041	Hot Mix Asphalt - 9.5 mm (Polymer Modified Thin Lift Surface Treatment)
Item 403.211	Hot Mix Asphalt – Shim
Item 403.2111	Hot Mix Asphalt – Shim (Polymer Modified)
Item 403.212	Hot Mix Asphalt - 4.75 mm (Shim)
Item 403.213	Hot Mix Asphalt - 12.5 mm (base and intermediate course)
Item 403.2131	Hot Mix Asphalt - 12.5 mm (base and intermediate course Polymer Modified)
Item 403.2132	Hot Mix Asphalt - 12.5 mm (Asphalt Rich Base and intermediate course)
Item 403.214	Hot Mix Asphalt - 4.75 mm (Surface)
Item 403.235	Hot Mix Asphalt (High Performance Rubberized HMA)
Item 403.301	Hot Mix Asphalt (Asphalt Rubber Gap-Graded)
Item 404.70	Colored Hot Mix Asphalt – 9.5mm (Surface)
Item 404.72	Colored Hot Mix Asphalt – 9.5mm (Islands, sidewalks, & incidentals)
Item 461.13	Light Capital Pavement
Item 462.30	Ultra-Thin Bonded Wearing Course
Item 462.301	Polymer Modified Ultra-Thin Bonded Wearing Course

Price adjustments will be based on the variance in costs for the performance graded binder component of hot mix asphalt. They will be determined as follows:

The quantity of hot mix asphalt for each pay item will be multiplied by the performance graded binder percentages given in the table below times the difference in price between the base price and the period price of asphalt cement. Adjustments will be made upward or downward, as prices increase or decrease.

- Item 403.102–6.2%
- Item 403.206–4.8%
- Item 403.207–5.2%
- Item 403.2071–5.2%
- Item 403.2072–5.8%
- Item 403.208–5.6%
- Item 403.2081–5.6%
- Item 403.209–6.2%
- Item 403.210–6.2%

Item 403.2101–6.2%  
Item 403.2102–6.8%  
Item 403.2104–6.2%  
Item 403.21041–6.2%  
Item 403.211–6.2%  
Item 403.2111–6.2%  
Item 403.212–6.8%  
Item 403.213–5.6%  
Item 403.2131–5.6%  
Item 403.2132–6.2%  
Item 403.214–6.8%  
Item 403.235–5.5%  
Item 403.301–6.2%  
Item 404.70–6.2%  
Item 404.72–6.2%  
Item 461.13–6.5%  
Item 462.30–0.0021 tons/SY  
Item 462.301–0.0021 tons/SY

**Hot Mix Asphalt:** The quantity of hot mix asphalt will be determined from the quantity shown on the progress estimate for each pay period.

**Base Price:** The base price of performance graded binder to be used is the price per standard ton current with the bid opening date. This price is determined by using the average New England Selling Price (Excluding the Connecticut market area), as listed in the Asphalt Weekly Monitor.

**Period Price:** The period price of performance graded binder will be determined by the Department by using the average New England Selling Price (Excluding the Connecticut market area), listed in the Asphalt Weekly Monitor current with the paving date. The maximum Period Price for paving after the adjusted Contract Completion Date will be the Period Price on the adjusted Contract Completion Date.

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

### **109.5.1 Definitions - Types of Delays**

Delete Paragraph 'A' in its entirety and replace with:

**"A. Excusable Delay** Except as expressly provided otherwise by this Contract, an "Excusable Delay" is a Delay to the Critical Path that is directly and solely caused by (1) a weather related Event of such an unusually severe nature that a Federal Emergency Disaster is declared. The Contractor will only be entitled to an adjustment of time if the Project falls within the geographic boundaries prescribed under the disaster declaration. or (2) a flooding event at the effected location of the Project that results in a Q25 headwater elevation, or greater, but less than a Q50 headwater elevation. Theoretical headwater elevations will be determined by the

Department; actual headwater elevations will be determined by the Contractor and verified by the Department or (3) An Uncontrollable Event.”

## **APPENDIX A TO DIVISION 100**

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

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

#### 203.02 Materials

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

**Crushed Stone, ¾ inch            703.13**

#### 203.042 Rock Excavation and Blasting

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

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

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

#### 304.02 Aggregate

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

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

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

Remove this Section in its entirety and replace with:

#### **SECTION 307**

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

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

**MATERIALS**

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

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

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

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

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

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

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

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

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

### **EQUIPMENT**

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

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

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

**307.041 Cement or Lime Spreader** If required by the contract, spreading of the Portland Cement or Hydrated Lime shall be done with a spreader truck designed to spread dry particulate (such as Portland Cement or Lime) or other approved means to insure a uniform distribution across the roadway and minimize fugitive dust. Pneumatic application, including through a slotted pipe, will not be permitted. Other systems that have been developed include fog systems, vacuum systems, etc. Slurry applications may also be accepted. The Department reserves the right to accept or reject the method of spreading cement. The Contractor shall provide a method for verifying that the correct amount of cement is being applied.

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

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

shall meet the requirements of Section 401.10 and the minimum allowable tire pressure shall be 85 psi.

### **MIX DESIGN**

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

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

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

### **CONSTRUCTION REQUIREMENTS**

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

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

- A. Recycling operations will be allowed between May 15<sup>th</sup> and September 15<sup>th</sup> inclusive in Zone 1 - Areas north of US Route 2 from Gilead to Bangor and north of Route 9 from Bangor to Calais.
- B. The atmospheric temperature, as determined by an approved thermometer placed in the shade at the recycling location, is 50°F and rising.
- C. When there is no standing water on the surface.
- D. During generally dry conditions, or when weather conditions are such that proper pulverizing, mixing, grading, finishing and curing can be obtained using proper procedures, and when compaction can be accomplished as determined by the Resident.
- E. When the surface is not frozen and when overnight temperatures are expected to be above 32°F.
- F. Wind conditions are such that the spreading of lime or cement on the roadway ahead of the recycling machine will not adversely affect the operation.

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

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

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

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

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

Additives, if required, shall be introduced following completion of the initial pulverizing and blending process. Emulsified asphalt stabilizer shall be incorporated into the top of the processed material as specified in section 307.04 to the depth specified in the contract by use of the liquid mixer unit or a distributor, at the rate specified in the mix design. The emulsified asphalt shall then be uniformly blended into a homogeneous mass until an apparent uniform distribution has occurred. The rate of application may be adjusted as necessary by the Resident. Cement or lime shall be introduced as described in section 307.041. The resultant material shall be graded and compacted to the cross-slope and profile shown on the plans or as directed by the Resident. The Contractor will also be responsible for re-establishing the existing profile grade.

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

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

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

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

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

## TESTING REQUIREMENTS

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

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

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

- A. Sources for all materials, including New Aggregate and Additional Recycled Material.
- B. Make and type of rollers including weight, weight per inch of steel wheels, and average contact pressure for pneumatic tired rollers.
- C. Testing Plan.
- D. Recycling operations including recycling speed, methods to ensure that segregation is minimized, grading and compacting operations.
- E. Methods for protecting the finished product from damage and procedures for any necessary corrective action.
- F. Method of grade checks.
- G. Examples of Quality Control forms.

- H. Name, responsibilities, and qualifications of the Responsible onsite Recycling Supervisor experienced and knowledgeable with the process.
- I. A note that all testing will be done in accordance with AASHTO and MDOT/ACM procedures.

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

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

**MINIMUM QUALITY CONTROL FREQUENCIES**

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

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

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

- A. The Contractor fails to follow the approved QCP.
- B. The Contractor fails to achieve 98 percent density after corrective action has been taken.
- C. The finished product is visually defective, as determined by the Resident.
- D. The computed yield differs from the mix design by 10 percent or more.

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

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

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

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

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

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

#### ACCEPTANCE TEST FREQUENCY

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

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

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

**307.12 Basis of Payment** The accepted quantity of Full Depth Recycled Asphalt Pavement (Untreated or Treated with Emulsified Asphalt Stabilizer) will be paid for at the contract unit price per square yard, complete in-place which price will be full

compensation for furnishing all equipment, materials and labor for pulverizing, blending, placing, grading, compacting, and for all incidentals necessary to complete the work.

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

Payments will be made under:

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

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

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

**SECTION 501**  
**FOUNDATION PILES**

501.05 – Method of Measurement

- b. Piles Furnished – After the second sentence, add the sentence “**Measurement will not include any pile tips**”.
- c. Piles in Place – Add the sentence to the end of the second paragraph, “**Measurement will include the pile tips**”.
- d. Pile Tips – Add the words “**on the Pile**” to the end of the sentence.

**SECTION 502**  
**STRUCTURAL CONCRETE**

502.05 Composition and Proportioning

Replace Table 1 with

TABLE 1

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

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

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

**Note #1** - Remove, “...Standard Specification Section 711.05, Protective Coating for Concrete Surfaces, and per the manufacturer’s recommendations, at no additional cost to the Department.” and replace with, “...Standard Specification Section 515, Protective Coating for Concrete Surfaces, at no additional cost to the Department.”

502.1703 Acceptance Methods A and B

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

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

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

502.1706 Acceptance Method C

Remove in its entirety and Replace with:

**502.1706 Acceptance Method C** The Department will determine the acceptability of the concrete through Acceptance testing. Acceptance tests will include compressive strength, air content and permeability. Method C concrete not meeting the requirements listed in Table 1 shall be removed and replaced at no cost to the Department. At the Department’s sole discretion, material not meeting requirements may be left in place and paid for at a reduced price as described in Section 502.195.

502.1707 Resolution of Disputed Acceptance Test Results

Section B

Remove “Rapid Chloride” from the section heading.  
In paragraph 4 replace T-277 with TP-95

502.192 Pay Adjustment for Chloride Permeability

Remove “Chloride” from the heading and from the first sentence.

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

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

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

502.195 Pay Adjustment Method C

In Table 6: Method C Pay Reductions (page 5-53)  
Under “Entrained Air” for “Class Fill”, in the first line,  
change from “< 4.0 (Removal)” to “< **4.5 (Removal)**”

In Table 6: Method C PAY REDUCTIONS, revise the Chloride Permeability section by removing it in its entirety and replacing it with:

Surface Resistivity {Permeability in Kohm-cms and Pay Reduction per CY}			
15-16 (\$50)	13 (\$25)	N/A	N/A
13-14 (\$75)	12(\$50)	N/A	N/A
12 (\$100)	11 (\$75)	N/A	N/A
11 (\$125)	10 (\$100)	N/A	N/A
< 11 (Removal)	< 10 (Removal)	N/A	N/A

**SECTION 504**  
**STRUCTURAL STEEL**

504.26 Welding Remove the second paragraph beginning with “The range of heat...” in its entirety.

504.29 Welding ASTM A 709 HPS 70W Steel. Remove the third paragraph beginning with “Make Weld runoff tabs...” in its entirety.

## **SECTION 527** **ENERGY ABSORBING UNIT**

527.02 Materials This section is revised to read as follows.

527.02 Materials Work Zone Crash Cushions must comply with NCHRP Report 350. Work Zone Crash Cushions shall be selected from MaineDOT’s Qualified Products List of Crash Cushions / Impact Attenuators, or an approved equal.

**Acceptance Testing of Precast/Prestressed Concrete**  
**Suggested Revisions to the Standard Specification to Require Acceptance Testing to be done by Representatives of the MaineDOT**

## **SECTION 534** **PRECAST STRUCTURAL CONCRETE**

534.14 Process Control Test Cylinders

Revise this subsection to read:

**“534.14 Acceptance and Quality Control Testing of Concrete Refer to Section 712.061.”**

## **SECTION 535** **PRECAST, PRESTRESSED CONCRETE SUPERSTRUCTURE**

Section 535.08 – Quality Assurance

Revise the second paragraph to read:

**“The QAI will perform acceptance sampling and testing and will witness or review documentation, workmanship and testing to assure the Work is being performed in accordance with the Contract Documents.”**

Section 535.15 - Process Control Test Cylinders

Revise the first paragraph to read:

**“535.15 Acceptance and Quality Control Testing of Concrete Acceptance of structural precast/prestressed units, for each day’s production, will be determined by the Department, based on compliance with this specification and satisfactory concrete testing results. At least once per week, the QAI will make 2 concrete cylinders (6 cylinders when the Contract includes permeability requirements) for use by the Department; cylinders shall be standard cured in accordance with AASHTO T23 (ASTM C31). The QAI will perform entrained air content and slump flow testing, determine water-cement ratio and determine temperature of the sampled concrete at the time of cylinder casting. All**

testing equipment required by the QAI to perform this testing shall be provided in accordance with Standard Specification Section 502.041, Testing Equipment. In addition, the Contractor shall provide a slump cone meeting the requirements of AASHTO T 119. Providing and maintaining testing and curing equipment shall be considered incidental to the work and no additional payment will be made.”

Insert the following as the second paragraph of Section 535.15:

“Quality Control concrete test cylinders shall be made for each day’s cast and each form bed used. Cylinders tested to determine strand release strength and design strength shall be field cured in accordance with AASHTO T23 (ASTM C31). 28 day cylinders shall be standard cured. Record unit identification, entrained air content, water-cement ratio, slump flow and temperature of the sampled concrete at the time of cylinder casting.”

## **SECTION 604** **MANHOLES, INLETS CATCH BASINS**

### 604.04 Adjusting Catch Basins and Manholes,

Add the following paragraph to the end of 604.04 b:

**The Department will allow the use of metal ring inserts set into the manhole top frame or composite risers placed beneath the manhole frame to adjust manhole slope and grade for paving projects. The use of metal ring inserts shall be in accordance with 604.04 d. Ring Insert Requirements. The use of composite risers shall be in accordance with 604.04 e. Composite Riser Requirements.**

Add the following paragraph after the first paragraph of 604.04 c:

**The Department will allow the use of metal ring inserts set into the manhole top frame or composite risers placed beneath the manhole frame to adjust manhole slope and grade for paving projects. The use of metal ring inserts shall be in accordance with 604.04 d. Ring Insert Requirements. The use of composite risers shall be in accordance with 604.04 e. Composite Riser Requirements.**

Add the following sections to 604.04:

**d. Ring Insert Requirements Ring inserts to adjust manhole top frame slope and grade will be allowed in accordance with the following requirements:**

#### **1) Materials**

- i. All ring inserts must be made of iron. *Multiple ring inserts will not be allowed.* The single ring insert may be any height up to a maximum of 2 inches tall.
- ii. Ring inserts shall not be welded to the manhole frame to prevent brittle failure of the cast iron frame.
- iii. Ring inserts shall be fastened to the manhole frame using liquid steel-filled epoxy such as Loctite Fixmaster Steel Liquid or equivalent. The epoxy shall be installed in accordance with the manufacturer's recommendations.

## 2) Where Ring Inserts May/May Not Be Used

- i. MaineDOT will allow the use of a single manhole ring insert to raise manholes on state and state-aid highways.
- ii. *Manhole ring inserts may not be used along state and state-aid highway sections where the speed limit is 40 miles per hour or more.* The standard brick and mortar or flat composite risers beneath the manhole frame must be used at these locations.

## 3) Construction Requirements For The Use of Iron Manhole Ring Inserts

- i. Wherever iron ring inserts are used to raise manhole top elevations, the rings shall be fastened to the existing manhole frame using liquid steel-filled epoxy. The liquid steel-filled epoxy shall be placed evenly around the entire manhole frame before placing the ring insert. *Unbonded ring inserts will not be allowed.* If the manufacturer's recommended construction practices result in loose or unacceptable manhole cover restraint, standard brick and mortar or flat composite risers beneath the manhole frame must be used at these locations.

**e. Composite Riser Requirements** Flat or beveled, doughnut-shaped, composite risers placed beneath the manhole frame to adjust slope and grade are allowed. The composite riser shall be fastened to both the top of the concrete cone and bottom of the manhole frame with the manufacturer's recommended epoxy. Composite risers may be used at all locations on state and state-aid highways under any legal speed limit without restriction.

## **SECTION 606** **GUARDRAIL**

**606.09 Basis of Payment** Amend the first sentence of the eighth paragraph of this subsection by removing the word "meter" and replace it with "linear foot".

## **SECTION 619**

## MULCH

### 619.07 Basis of Payment

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

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

In the list of Pay Items add “**619.13 Bark Mulch**” with a Pay Unit of “**CY**”.

Change the description of 619.1301 from “Bark Mulch” to “**Mulch – Plan Quantity**”

In the list of Pay Items add “**619.14 Erosion Control Mix**” with a Pay Unit of “**CY**”.

Change the description of 619.1401 from “Erosion Control Mix” to “**Mulch – Plan Quantity**”

## SECTION 621 LANDSCAPING

### 621.0002 Materials - General

In the list of items change “Organic Humus” to “**Humus**”.

### 621.0019 Plant Pits and Beds

c Class A Planting

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

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

626.033 Polyvinylchloride Conduit Installation Amend the following subsection by adding the following paragraph to its end:

### “NON-METALLIC UNDER PAVEMENT CONDUIT INSTALLATION

**Where noted on the drawings, non-metallic under pavement conduit of schedule 80 or greater rating shall be provided to facilitate conduit crossing of the existing highway and ramps without disruption to the existing highway and ramp pavement surface. The non-metallic under pavement conduit shall be hydraulically jacked or directional bored below the highway and ramp at a depth of not less than (36 inches). Under pavement conduit shall extend for a distance of (10 feet) beyond the highway or ramp edge at each side.”**

### 626.034 Concrete Foundations

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

**“ No foundation design will be required for 18- and 24-inch diameter foundations for structures less than 30-feet tall and with no projecting arms. A foundation design prepared by a Professional Engineer licensed in accordance with the laws of the State of Maine will be required for all other foundations Precast foundations will be permitted for**

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

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

“...The Contractor shall provide temporary dewatering of excavations for foundations such that concrete is placed in the dry. **Concrete for drilled shafts shall be placed in accordance with Section 502.10 as temporary casing is withdrawn to prevent debris from contaminating the foundation and to ensure concrete is cast against the surrounding soil. Concrete for drilled shafts and spread footings shall be Class A in accordance with Section 502 - Structural Concrete. Precast foundations will not be permitted except as specified above in this Section.** Backfill for spread footing foundations shall be Gravel Borrow meeting the requirements of Section 703.20 - Gravel Borrow.....”

626.05 Basis of Payment Amend this subsection by adding the following paragraph and Pay Item:

**“Payment will be made for the total number of (linear feet) of under pavement conduit actually furnished, installed and accepted at the contract price per (linear foot). This price shall include the cost of: furnishing and installing the conduit; excavating; furnishing special backfilling materials, pull wire, fittings, grounding and bonding; test cleaning interiors of conduits and all materials, labor, equipment and incidentals necessary to complete the work.”**

<b>Pay Item</b>	<b>Pay Unit</b>
626.251 Non-Metallic Under pavement Conduit (Schedule 80 or greater rating)	(Linear Foot)

## **SECTION 627** **PAVEMENT MARKINGS\_**

627.10 Basis of Payment Remove the existing “627.78 Temporary Pavement Marking Line, White or Yellow” and replace with: **627.78 TEMP 4" PAINT PVMT MARK LINE W  
OR Y LF**

## **SECTION 652**

## MAINTENANCE OF TRAFFIC

652.3 Submittal of Traffic Control Plan On page 6-148, note **f**, in the last sentence revise the “105.2.2” to “105.2.3” so that the last sentence reads, “**For a related provision, see Section 105.2.3 – Project Specific Emergency Planning.**”

652.3.4 General Revise the eighth paragraph by removing “Earth Berm” and replace it with “**Concrete Barrier**”.

652.4 Flaggers In the first paragraph, revise the fifth sentence which says:

For nighttime conditions, Class 3 apparel, meeting ANSI 107-2004, shall be worn along with a hardhat with 360° retro-reflectivity.

So that it reads:

**For nighttime conditions, Class 3 apparel, meeting ANSI 107-2004, including a Class 3 top (vest, shirt or jacket) and a Class E bottom (pants or coveralls), shall be worn along with a hardhat with 360 ° retro-reflectivity.**

### 652.41 TRAFFIC OFFICERS

Revise this subsection so that the subsection number and title is “**652.4.1 TRAFFIC OFFICERS**”

## SECTION 656

### TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL

656.5.2 If No Pay Item Add the following to the end of the first paragraph:

**“Failure by the Contractor to follow Standard Specification or Special Provision - Section 656 will result in a violation letter and a reduction in payment as shown in the schedule list in 656.5.1. 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 660

### ON-THE-JOB TRAINING

#### 660.06 Method of Measurement

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

660.07 Basis of payment to the Contractor

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

Payment will be made under

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

**SECTION 674**  
**PREFABRICATED CONCRETE MODULAR GRAVITY WALL**

674.02 Materials

Amend this section by adding the following after “Concrete Units:” and before the paragraph beginning with “Tolerances”.

**Concrete shall be Class P. The concrete shall contain a minimum of 5.5 gallons per cubic yard of calcium nitrite solution.**

**The minimum permeability of the concrete as indicated by Surface Resistivity shall be 17 KOhm-cm.**

**Defects Defects which may cause rejection of precast units include, but are not limited to, the following:**

**Any discontinuity (crack, rock pocket, etc.) of the concrete which could allow moisture to reach the reinforcing steel.**

**Rock pockets or honeycomb over 6 square inches in area or over 1 inch deep.**

**Edge or corner breakage exceeding 12 inches in length or 1 inch in depth.**

**Any other defect that clearly and substantially impacts the quality, durability, or maintainability of the structure, as determined by the Fabrication Engineer.**

**Repair honeycombing, ragged or irregular edges and other non-structural or cosmetic defects using a patching material from the MaineDOT Qualified Products List (QPL). The repair, including preparation of the repair area, mixing and application and curing of the patching material, shall be in accordance with the manufacturer's product data sheet. Corners that are not exposed in the final product may be ground smooth with no further repair necessary if the depth of the defect does not exceed 1/2 inch. Remove form ties and other hardware to a depth of not less than 1 inch from the face of the concrete and patch the holes using a patching material from the MaineDOT QPL.**

**Repair structural defects only with the approval of the Fabrication Engineer. Submit a nonconformance report (NCR) to the Fabrication Engineer with a proposed repair procedure. Do not perform structural repairs without an NCR that has been reviewed by the Fabrication Engineer. Structural defects include, but are not be limited to, exposed reinforcing steel or strand, cracks in bearing areas, through cracks and cracks 0.013 inch**

**in width that extend more than 12 inches in length in any direction. Give the QAI adequate notice prior to beginning any structural repairs.**

### **SECTION 677**

On page 6 - 203 change “636.041” to “677.041”

### **SECTION 703** **AGGREGATES**

#### 703.0201 Alkali Silica Reactive Aggregates

Remove this section in its entirety and replace with the following:

**703.0201 Alkali Silica Reactive Aggregates. All coarse and fine aggregates proposed for use in concrete shall be tested for Alkali Silica Reactivity (ASR) potential under AASHTO T 303 (ASTM C 1260), Accelerated Detection of Potentially Deleterious Expansion of Mortar Bars Due to Alkali-Silica Reaction, prior to being accepted for use. Acceptance will be based on testing performed by an accredited independent lab submitted to the Department. Aggregate submittals will be required on a 5-year cycle, unless the source or character of the aggregate in question has changed within 5 years from the last test date.**

**As per AASHTO T 303 (ASTM C 1260): Use of a particular coarse or fine aggregate will be allowed with no restrictions when the mortar bars made with this aggregate expand less than or equal to 0.10 percent at 30 days from casting. Use of a particular coarse or fine aggregate will be classified as potentially reactive when the mortar bars made with this aggregate expand greater than 0.10 percent at 30 days from casting. Use of this aggregate will only be allowed with the use of cement-pozzolan blends and/or chemical admixtures that result in mortar bar expansion of less than 0.10 percent at 30 days from casting as tested under ASTM C 1567.**

**Acceptable pozzolans and chemical admixtures that may be used when an aggregate is classified as potentially reactive include, but are not limited to the following:**

**Class F Coal Fly Ash meeting the requirements of AASHTO M 295.**

**Ground Granulated Blast Furnace Slag (Grade 100 or 120) meeting the requirements of AASHTO M 302.**

**Densified Silica Fume meeting the requirements of AASHTO M 307.**

**Lithium based admixtures**

**Metakaolin**

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

703.06 Aggregate for Base and Subbase - Remove the first two paragraphs in their entirety and replace with these:

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

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

703.19 Granular Borrow

Remove the gradation requirements table, and replace with the following:

Sieve Designation	Percentage by Weight Passing Square Mesh Sieves	
	Material for Underwater Backfill	Material for Embankment Construction
6 inch	100	
No. 40	0-70	0-70
No. 200	0-7.0	0-20.0

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

## **SECTION 712** **MISCELLANEOUS HIGHWAY MATERIAL**

Section 712.061- Structural Precast Concrete Units

Under the heading, Quality Control and Quality Assurance, revise the fourth paragraph to read:

**“Acceptance is the prerogative of the Department. The Department will conduct Quality Assurance (QA) in accordance with Standard Specification Subsection 106.5. Testing deemed necessary by the Department that is in addition to the minimum testing**

requirements will be scheduled to minimize interference with the production schedule. The QAI will perform acceptance sampling and testing and will witness or review documentation, workmanship and testing to assure the Work is being performed in accordance with the Contract Documents.”

Under the heading, Concrete Testing, revise the first paragraph to read as the following two paragraphs:

**“Concrete Testing Acceptance of structural precast units, for each day’s production, will be determined by the Department, based on compliance with this specification and satisfactory concrete testing results. At least once per week, the QAI will make 2 concrete cylinders (6 cylinders when the Contract includes permeability requirements) for use by the Department; cylinders shall be standard cured in accordance with AASHTO T23 (ASTM C31). The QAI will perform entrained air content and slump flow testing, determine water-cement ratio and determine temperature of the sampled concrete at the time of cylinder casting. All testing equipment required by the QAI to perform this testing shall be in accordance with Standard Specification Section 502.041, Testing Equipment. In addition, the Contractor shall provide a slump cone meeting the requirements of AASHTO T 119. Providing and maintaining testing and curing equipment shall be considered incidental to the work and no additional payment will be made.**

Quality Control test cylinders shall be made and tested in accordance with the following standards:

- AASHTO T 22 (ASTM C39) Test Method for Compressive Strength of Cylindrical Concrete Specimens**
- AASHTO T23 (ASTM C31) Practice for Making and Curing Concrete Test Specimens in Field**
- AASHTO T141 (ASTM C172) Practice for Sampling Freshly Mixed Concrete**
- AASHTO T152 (ASTM C231) Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method**
- AASHTO T196 (ASTM C173) Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method**
- ASTM C1064 Test Method for Temperature of Freshly mixed Portland Cement Concrete**
- ASTM C1611 Standard Test Method for Slump Flow of Self-Consolidating Concrete”**

Under the heading, Concrete Testing, delete the paragraph that begins:  
“At least once per week, the Contractor shall make 2 concrete cylinders.....for use by the Department.....”

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

717.02 Agricultural Ground Limestone

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

APPENDIX A TO DIVISION 100

SECTION 1 - BIDDING PROVISIONS

A. Federally Required Certifications By signing and delivering a Bid, the Bidder certifies as provided in all certifications set forth in this Appendix A - Federal Contract Provisions Supplement including:

- Certification Regarding No Kickbacks to Procure Contract as provided on this page 1 below.
- Certification Regarding Non-collusion as provided on page 1 below.
- Certification Regarding Non-segregated Facilities as provided by FHWA Form 1273, section III set forth on page 21 below.
- "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion" as provided by FHWA Form 1273, section XI set forth on page 32 below.
- "Certification Regarding Use of Contract Funds for Lobbying" as provided by FHWA Form 1273, section XII set forth on page 35 below.

Unless otherwise provided below, the term "Bidder", for the purposes of these certifications, includes the Bidder, its principals, and the person(s) signing the Bid. Upon execution of the Contract, the Bidder (then called the Contractor) will again make all the certifications indicated in this paragraph above.

CERTIFICATION REGARDING NO KICKBACKS TO PROCURE CONTRACT Except expressly stated by the Bidder on sheets submitted with the Bid (if any), the Bidder hereby certifies, to the best of its knowledge and belief, that it has not:

(A) employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me) to solicit or secure this contract;

(B) agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out the contract, or;

(C) paid, or agreed to pay, to any firm, organization, or person (other than a bona fide employee working solely for me) any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out the contract;

By signing and submitting a Bid, the Bidder acknowledges that this certification is to be furnished to the Maine Department of Transportation and the Federal Highway Administration, U.S. Department of Transportation in connection with this contract in anticipation of federal aid highway funds and is subject to applicable state and federal laws, both criminal and civil.

CERTIFICATION REGARDING NONCOLLUSION Under penalty of perjury as provided by federal law (28 U.S.C. §1746), 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 the Contract.

For a related provisions, see Section 102.7.2 (C) of the Standard Specifications - "Effects of Signing and Delivery of Bids" - "Certifications", Section 3 of this Appendix A entitled "Other Federal Requirements" including section XI - "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion" and section XII. - "Certification Regarding Use of Contract Funds for Lobbying."

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B. Bid Rigging Hotline To report bid rigging activities call: **1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

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## SECTION 2 - FEDERAL EEO AND CIVIL RIGHTS REQUIREMENTS

Unless expressly otherwise provided in the Bid Documents, the provisions contained in this Section 2 of this "Federal Contract Provisions Supplement" are hereby incorporated into the Bid Documents and Contract.

A. Nondiscrimination & Civil Rights - Title VI The Contractor and its subcontractors shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Department deems appropriate. The Contractor and subcontractors shall comply with Title VI of the Civil Rights Act of 1964, as amended, and with all State of Maine and other Federal Civil Rights laws.

For related provisions, see Subsection B - "Nondiscrimination and Affirmative Action - Executive Order 11246" of this Section 2 and Section 3 - Other Federal Requirements of this "Federal Contract Provisions Supplement" including section II - "Nondiscrimination" of the "Required Contract Provisions, Federal Aid Construction Contracts", FHWA-1273.

B. Nondiscrimination and Affirmative Action - Executive Order 11246 Pursuant to Executive Order 11246, which was issued by President Johnson in 1965 and amended in 1967 and 1978, this Contract provides as follows.

The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its efforts to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

Ensure and maintain a working environment free of harassment, intimidations, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all forepersons, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its union have employment opportunities available, and to maintain a record of the organization's responses.

Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.

Provide immediate written notification to the Department's Civil Rights Office when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Design-Builder's efforts to meet its obligations.

Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under B above.

Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligation; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Forepersons, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractor's and Subcontractors with whom the Contractor does or anticipates doing business.

Direct its recruitment efforts, both orally and written to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above describing the openings, screenings, procedures, and test to be used in the selection process.

Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth, both on the site and in other areas of a Contractor's workforce.

Validate all tests and other selection requirements.

Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

Ensure that all facilities and company activities are non segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction Contractor's and suppliers, including circulation of solicitations to minority and female Contractor associations and other business associations.

Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

C. Goals for Employment of Women and Minorities Per Executive Order 11246, craft tradesperson goals are 6.9% women and .5% minorities employed. However, goals may be adjusted upward at the mutual agreement of the Contractor and the Department. Calculation of these percentages shall not include On-the-Job Training Program trainees, and shall not include clerical or field clerk position employees.

For a more complete presentation of requirements for such Goals, see the federally required document "Goals for Employment of Females and Minorities" set forth in the next 6 pages below.

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Start of GOALS FOR EMPLOYMENT OF FEMALES AND MINORITIES  
Federally Required Contract Document

§60-4.2 Solicitations

(d) The following notice shall be included in, and shall be part of, all solicitations for offers and bids on all Federal and federally assisted construction contracts or subcontracts in excess of \$10,000 to be performed in geographical areas designated by the Director pursuant to §60-4.6 of this part (see 41 CFR 60-4.2(a)):

Notice of Requirement for Affirmative Action to Ensure Equal Opportunity (Executive Order 11246)

1. The Offeror's or bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

<u>Goals for female participation in each trade</u>	6.9%
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Goals for minority participation for each trade

Maine

001 Bangor, ME	0.8%
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Non-SMSA Counties (Aroostook, Hancock, Penobscot, Piscataquis, Waldo, Washington)

002 Portland-Lewiston, ME

SMSA Counties: 4243 Lewiston-Auburn, ME	0.5%
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(Androscoggin)

6403 Portland, ME	0.6%
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(Cumberland, Sagadahoc)

Non-SMSA Counties:  
(Franklin, Kennebec, Knox, Lincoln, Oxford, Somerset, York)

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non federally involved construction.

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be in violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor, estimated dollar amount of the subcontract; estimated started and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the Contract resulting from this solicitation, the "covered area" is (insert description of the geographical areas where the contract is to be performed giving the state, county and city, if any).

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION  
CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

1. As used in these specifications:
  - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
  - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
  - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department form 941;
  - d. "Minority" includes:

- (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
  - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
  - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of the North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the contractor, is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors for Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a. through p. of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical areas where the work is being performed. Goals are published periodically in the Federal Register in notice form and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specific.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant, thereto.

6. In order for the non working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as expensive as the following:
  - a. Ensure and maintain a working environment free of harassment, intimidation, coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, when possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
  - b. Establish and maintain a current list of minority and female recruitment sources provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.
  - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment sources or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
  - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
  - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources complied under 7b above.

- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment, efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing prior to the date for the acceptance of applications for apprenticeship or the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on site and in other areas of a Contractor's work force.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

- n. Ensure that all facilities and company activities are non segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
  - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitation to minority and female contractor associations and other business associations.
  - p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7 a through p.). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7 a through p. of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program and reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions take on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, specific minority group of women is underutilized.)
10. The Contractor shall not use the goals and timetables or affirmative action even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementation regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.6.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g. mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and location at which the work was performed. Records be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

End of GOALS FOR EMPLOYMENT OF FEMALES AND MINORITIES  
Federally Required Contract Document

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D. Section '**D Disadvantaged Business Enterprise (DBE) Requirements**' is removed in its entirety. The DBE material is in:

**Section 105.10 EQUAL OPPORTUNITY AND CIVIL RIGHTS.**

**SECTION 3 - OTHER FEDERAL REQUIREMENTS**

Unless expressly otherwise provided in the Bid Documents, the provisions contained in this Section 3 of this "Federal Contract Provisions Supplement" are hereby incorporated into the Bid Documents and Contract.

A. Buy America

If the cost of products purchased for permanent use in this project which are manufactured of steel, iron or the application of any coating to products of these materials exceeds 0.1 percent of the contract amount, or \$2,500.00, whichever is greater, the products shall have been manufactured and the coating applied in the United States. The coating materials are not subject to this clause, only the application of the coating. In computing that amount, only the cost of the product and coating application cost will be included.

Ore, for the manufacture of steel or iron, may be from outside the United States; however, all other manufacturing processes of steel or iron must be in the United States to qualify as having been manufactured in the United States.

United States includes the 50 United States and any place subject to the jurisdiction thereof.

Products of steel include, but are not limited to, such products as structural steel, piles, guardrail, steel culverts, reinforcing steel, structural plate and steel supports for signs, luminaries and signals.

Products of iron include, but are not limited to, such products as cast iron grates.

Application of coatings include, but are not limited to, such applications as epoxy, galvanized and paint.

To assure compliance with this section, the Contractor shall submit a certification letter on its letterhead to the Department stating the following:

“This is to certify that products made of steel, iron or the application of any coating to products of these materials whose costs are in excess of \$2,500.00 or 0.1 percent of the original contract amount, whichever is greater, were manufactured and the coating, if one was required, was applied in the United States.”

## B. Materials

### a. Convict Produced Materials References: 23 U.S.C. 114(b)(2), 23 CFR 635.417

Applicability: FHWA's prohibition against the use of convict material only applies to Federal-aid highways. Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if: 1) such materials have been produced by convicts who are on parole, supervised release, or probation from a prison; or 2) such material has been produced in a qualified prison facility, e.g., prison industry, with the amount produced during any 12-month period, for use in Federal-aid projects, not exceeding the amount produced, for such use, during the 12-month period ending July 1, 1987.

Materials obtained from prison facilities (e.g., prison industries) are subject to the same requirements for Federal-aid participation that are imposed upon materials acquired from other sources. Materials manufactured or produced by convict labor will be given no preferential treatment.

The preferred method of obtaining materials for a project is through normal contracting procedures which require the contractor to furnish all materials to be incorporated in the work. The contractor selects the source, public or private, from which the materials are to be obtained (23 CFR 635.407). Prison industries are prohibited from bidding on projects directly (23 CFR 635.112e), but may act as material supplier to construction contractors.

Prison materials may also be approved as State-furnished material. However, since public agencies may not bid in competition with private firms, direct acquisition of materials from a

prison industry for use as State-furnished material is subject to a public interest finding with the Division Administrator's concurrence (23 CFR 635.407d). Selection of materials produced by convict labor as State-furnished materials for mandatory use should be cleared prior to the submittal of the Plans Specifications & Estimates (PS&E).

b. Patented/Proprietary Products References: 23 U.S.C. 112, 23 CFR 635.411

FHWA will not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the plans and specifications for a project, unless:

- the item is purchased or obtained through competitive bidding with equally suitable unpatented items,
- the STA certifies either that the proprietary or patented item is essential for synchronization with the existing highway facilities or that no equally suitable alternative exists, or
- the item is used for research or for a special type of construction on relatively short sections of road for experimental purposes. States should follow FHWA's procedures for "Construction Projects Incorporating Experimental Features" ([expermnt.htm](#)) for the submittal of work plans and evaluations.

The primary purpose of the policy is to have competition in selection of materials and allow for development of new materials and products. The policy further permits materials and products that are judged equal may be bid under generic specifications. If only patented or proprietary products are acceptable, they shall be bid as alternatives with all, or at least a reasonable number of, acceptable materials or products listed; and the Division Administrator may approve a single source if it can be found that its utilization is in the public interest.

Trade names are generally the key to identifying patented or proprietary materials. Trade name examples include 3M, Corten, etc. Generally, products identified by their brand or trade name are not to be specified without an "or equal" phrase, and, if trade names are used, all, or at least a reasonable number of acceptable "equal" materials or products should be listed. The licensing of several suppliers to produce a product does not change the fact that it is a single product and should not be specified to the exclusion of other equally suitable products.

c. State Preference References: 23 U.S.C. 112, 23 CFR 635.409

Materials produced within Maine shall not be favored to the exclusion of comparable materials produced outside of Maine. State preference clauses give particular advantage to the designated source and thus restrict competition. Therefore, State preference provisions shall not be used on any Federal-aid construction projects.

This policy also applies to State preference actions against materials of foreign origin, except as otherwise permitted by Federal law. Thus, States cannot give preference to in-State material sources over foreign material sources. Under the Buy America provisions, the States are

permitted to expand the Buy America restrictions provided that the STA is legally authorized under State law to impose more stringent requirements.

d. State Owned/Furnished/Designated Materials References: 23 U.S.C. 112, 23 CFR 635.407

Current FHWA policy requires that the contractor must furnish all materials to be incorporated in the work, and the contractor shall be permitted to select the sources from which the materials are to be obtained. Exceptions to this requirement may be made when there is a definite finding, by MaineDOT and concurred in by Federal Highway Administration's (FHWA) Division Administrator, that it is in the public interest to require the contractor to use materials furnished by the MaineDOT or from sources designated by MaineDOT. The exception policy can best be understood by separating State-furnished materials into the categories of manufactured materials and local natural materials.

Manufactured Materials When the use of State-furnished manufactured materials is approved based on a public interest finding, such use must be made mandatory. The optional use of State-furnished manufactured materials is in violation of our policy prohibiting public agencies from competing with private firms. Manufactured materials to be furnished by MaineDOT must be acquired through competitive bidding, unless there is a public interest finding for another method, and concurred in by FHWA's Division Administrator.

Local Natural Materials When MaineDOT owns or controls a local natural materials source such as a borrow pit or a stockpile of salvaged pavement material, etc., the materials may be designated for either optional or mandatory use; however, mandatory use will require a public interest finding (PIF) and FHWA's Division Administrator's concurrence.

In order to permit prospective bidders to properly prepare their bids, the location, cost, and any conditions to be met for obtaining materials that are made available to the contractor shall be stated in the bidding documents.

Mandatory Disposal Sites Normally, the disposal site for surplus excavated materials is to be of the contractor's choosing; although, an optional site(s) may be shown in the contract provisions. A mandatory site shall be specified when there is a finding by MaineDOT, with the concurrence of the Division Administrator, that such placement is the most economical or that the environment would be substantially enhanced without excessive cost. Discussion of the mandatory use of a disposal site in the environmental document may serve as the basis for the public interest finding.

Summarizing FHWA policy for the mandatory use of borrow or disposal sites:

- mandatory use of either requires a public interest finding and FHWA's Division Administrator's concurrence,
- mandatory use of either may be based on environmental consideration where the environment will be substantially enhanced without excessive additional cost, and
- where the use is based on environmental considerations, the discussion in the environmental document may be used as the basis for the public interest finding.

Factors to justify a public interest finding should include such items as cost effectiveness, system integrity, and local shortages of material.

C. Standard FHWA Contract Provisions - FHWA 1273

Unless expressly otherwise provided in the Bid Documents, the following “Required Contract Provisions, Federal Aid Construction Contracts”, FHWA-1273, are hereby incorporated into the Bid Documents and Contract.

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**Cargo Preference Act : Contractor and Subcontractor Clauses.** “Use of United States-flag vessels: The contractor agrees—“(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.”(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.”(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.”(Reorganization Plans No. 21 of 1950 (64 Stat. 1273) and No. 7 of 1961 (75 Stat. 840) as amended by Pub. L. 91-469 (84 Stat. 1036) and Department of Commerce Organization Order 10-8 (38 FR 19707, July 23, 1973)) [42 FR 57126, Nov. 1, 1977]

The Cargo Preference Act requirements apply to materials or equipment that are acquired for a specific Federal-aid highway project. In general, the requirements are not applicable to goods or materials that come into inventories independent of an FHWA funded-contract. For example, the requirements would not apply to shipments of Portland cement, asphalt cement, or aggregates, as industry suppliers and contractors use these materials to replenish existing inventories. In general, most of the materials used for highway construction originate from existing inventories and are not acquired solely for a specific Federal-aid project. However, if materials or equipment are acquired solely for a Federal-aid project, then the Cargo Preference Act requirements apply.”

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Start of FHWA 1273 REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS (As revised through May 1, 2012)

FHWA-1273 -- Revised May 1, 2012

**REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

## ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

### **I. GENERAL**

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment,

termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

## II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability.

The following procedures shall be followed:

- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women.

Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even

though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

**10. Assurance Required by 49 CFR 26.13(b):**

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### **III. NONSEGREGATED FACILITIES**

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### **IV. DAVIS-BACON AND RELATED ACT PROVISIONS**

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### **1. Minimum wages**

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (ii) The classification is utilized in the area by the construction industry; and
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## **2. Withholding**

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

## **3. Payrolls and basic records**

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act),

daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee ( e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the “Statement of Compliance” required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### **4. Apprentices and trainees**

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a

different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

**7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

**10. Certification of eligibility.**

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

**V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## **VI. SUBLETTING OR ASSIGNING THE CONTRACT**

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## **VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

### **VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

## **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## **X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

### **1. Instructions for Certification – First Tier Participants:**

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

**2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:**

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**2. Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--  
Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR  
APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL  
ACCESS ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

End of FHWA 1273

## **The United States Department of Transportation (USDOT)**

### **FHWA STANDARD TITLE VI/NONDISCRIMINATION ASSURANCES**

#### **DOT Order No. 1050.2A**

The Maine Department of Transportation (herein referred to as the "Recipient"), **HEREBY AGREES THAT**, as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation (DOT), through The Federal Highway Administration (FHWA), is subject to and will comply with the following:

#### **Statutory/Regulatory Authorities**

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 C.F.R. Part 21 (entitled *Nondiscrimination In Federally-Assisted Programs Of The Department Of Transportation—Effectuation Of Title VI Of The Civil Rights Act Of 1964*);
- 28 C.F.R. section 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964);

***FHWA may include additional Statutory/Regulatory Authorities here.***

The preceding statutory and regulatory cites hereinafter are referred to as the "Acts" and "Regulations," respectively.

#### **General Assurances**

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

*No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity," for which the Recipient receives Federal financial assistance from DOT, including FHWA..*

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Nondiscrimination requirements (The Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973), by restoring the broad, institutional-wide scope and coverage of these nondiscrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

***FHWA may include additional General Assurances in this section, or reference an addendum here.***

#### **Specific Assurances**

More specifically, and without limiting the above general Assurance, the Recipient agrees with and gives the following Assurances with respect to its federally assisted programs:

1. The Recipient agrees that each "activity," "facility," or "program," as defined in §§ 21.23 (b) and 21.23 (e) of 49 C.F.R. § 21 will be (with regard to an "activity") facilitated, or will be (with regard to a "facility") operated, or will be (with regard to a "program") conducted in compliance with all requirements imposed by, or pursuant to the Acts and the Regulations.
2. The Recipient will insert the following notification in all solicitations for bids, Requests For Proposals for work, or material subject to the Acts and the Regulations made in connection with all Federal Highway Programs and, in adapted form, in all proposals for negotiated agreements regardless of funding source:

*The (Agency), in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively insure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.*

3. The Recipient will insert the clauses of Appendix A and E of this Assurance in every contract or agreement subject to the Acts and the Regulations.
4. The Recipient will insert the clauses of Appendix B of this Assurance, as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a Recipient.
5. That where the Recipient receives Federal financial assistance to construct a facility, or part of a facility, the Assurance will extend to the entire facility and facilities operated in connection therewith.
6. That where the Recipient receives Federal financial assistance in the form, or for the acquisition of real property or an interest in real property, the Assurance will extend to rights to space on, over, or under such property.
7. That the Recipient will include the clauses set forth in Appendix C and Appendix D of this Assurance, as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the Recipient with other parties:
  - a. for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
  - b. for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
8. That this Assurance obligates the Recipient for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the Assurance obligates the Recipient, or any transferee for the longer of the following periods:

- a. the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
  - b. the period during which the Recipient retains ownership or possession of the property.
9. The Recipient will provide for such methods of administration for the program as are found by the Secretary of Transportation or the official to whom he/she delegates specific authority to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the Acts, the Regulations, and this Assurance.
10. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Acts, the Regulations, and this Assurance.

***FHWA may include additional Specific Assurances in this section.***

By signing this ASSURANCE, Maine Department of Transportation also agrees to comply (and require any subrecipients, sub-grantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing the FHWA access to records, accounts, documents, information, facilities, and staff. You also recognize that you must comply with any program or compliance reviews, and/or complaint investigations conducted by FHWA. You must keep records, reports, and submit the material for review upon request to FHWA, or their designees in a timely, complete, and accurate way. Additionally, you must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.

Maine Department of Transportation gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the U.S. Department of Transportation. This ASSURANCE is binding on Maine Department of Transportation, other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in it programs. . The person(s) signing below is authorized to sign this ASSURANCE on behalf of the Recipient.

***Name of Recipient: Maine Department of Transportation***



***David Bernhardt, Commissioner***

DATED: 9/18/14

## APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, **Federal Highway Administration**, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations as set forth in Appendix E, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor’s obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.
4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the **Federal Highway Administration**, to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the **Federal Highway Administration**, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a contractor’s noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the **Federal Highway Administration**, may determine to be appropriate, including, but not limited to:
  - a. withholding payments to the contractor under the contract until the contractor complies; and/or
  - b. cancelling, terminating, or suspending a contract, in whole or in part.

**Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the **Federal Highway Administration**, may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

**(APPENDIX C TO MAINEDOT TITLE VI ASSURANCE)**

**FEDERAL HIGHWAY ADMINISTRATION ASSISTED PROGRAMS**

The following clauses shall be included in all deeds, licenses, leases, permits, or similar instruments entered into

by the Maine Department of Transportation pursuant to the provisions of Assurance 7(a).

The (grantee, licensee, lessee, permittee, etc., as appropriate) for herself/himself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that in the event facilities are constructed, maintained, or otherwise operated on the said property described in this (deed, license, lease, permit, etc.) for a purpose for which a Department of Transportation program or activity is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee lessee, permittee, etc.) shall maintain and operate such facilities and services in compliance with all other requirements imposed pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination of Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended.

[Include in licenses, leases, permits, etc.]\*

That in the event of breach of any of the above nondiscrimination covenants, Maine Department of Transportation shall have the right to terminate the [license, lease, permit, etc.] and to re-enter and repossess said land and the facilities thereon, and hold the same as if said [licenses, lease, permit, etc.] had never been made or issued.

[Include in deeds]\*

That in the event of breach of any of the above nondiscrimination covenants, Maine Department of Transportation shall have the right to re-enter said lands and facilities thereon, and the above described lands and facilities shall thereupon revert to and vest in and become the absolute property of Maine Department of Transportation and its assigns.

The following shall be included in all deeds, licenses, leases, permits, or similar agreements entered into by Maine Department of Transportation pursuant to the provisions of Assurance 7(b).

The (grantee, licensee, lessee, permittee, etc., as appropriate) for herself/himself, his/her personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in case of deeds, and leases add "as a covenant running with the land") that (1) no person on the grounds of race, color, or national origin shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over or under such land and the furnishing services thereon, no person on the grounds of race, color, or national origin shall be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination, and (3) that the (grantee, licensee, lessee, permittee, etc.) shall use the premises in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended.

[Include in licenses, leases, permits, etc.]\*

That in the event of breach of any of the above nondiscrimination covenants, Maine Department of Transportation shall have the right to terminate the [license, lease, permit, etc.] and to re-enter and repossess said land and the facilities thereon, and hold the same as if said [license, lease, permit, etc.] had never been made or issued.

[Include in deeds]\*

That in the event of breach of any of the above nondiscrimination covenants, Maine Department of Transportation shall have the right to re-enter said land and facilities thereon, and the above described lands and facilities shall thereupon revert to and vest in and become the absolute property of Maine Department of Transportation and its assigns.

\* Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to effectuate the purpose of Title VI of the Civil Rights Act of 1964.

## APPENDIX D

### CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by The Maine Department of Transportation pursuant to the provisions of Assurance 7(b):

- A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, “as a covenant running with the land”) that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discriminations, (3) that the (grantee, licensees, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.
- B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non-discrimination covenants, (**The Maine Department of Transportation**) will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.\*
- C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, (**The Maine Department of Transportation**) will there upon revert to and vest in and become the absolute property of (**The Maine Department of Transportation**) and its assigns.\*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

## APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

### **Pertinent Non-Discrimination Authorities:**

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. §2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. §4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. §324 *et seq.*), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. §794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. §6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 U.S.C. §471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. Parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. §47123) (prohibits discrimination on the basis of race, color, national origin and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).



## Environmental Summary Sheet

WIN: 19196.00  
Town: Ellsworth  
CPD Team Leader: Colin Greenan  
ENV Field Contact: Ryan Annis

Date Submitted: 3/16/16

NEPA Complete: Programmatic CE 5/12/15

**Section 106**  
SHPO Concurrence - Conditional No Adverse Effect  
Section 106 Resources: Glacial rock outcrop located between Sta. 1317+00 and 1317+50 Right  
**\*See Special Note in plans and SP 105.9**

**Section 4(f) and 6(f)**  
Section 4(f)  
Review Complete - *De minimis* documentation completed 4/10/15  
Section 6(f)  
Not Applicable - No Properties

**Maine Department of Inland Fisheries and Wildlife Essential Habitat**  
Not Applicable **Timing Window:** Not Applicable

**Section 7**  
Informal Consultation  
**Species of Concern:** Northern long-eared bat (not likely to adversely affect, no clearing restrictions)  
Atlantic salmon (not likely to adversely affect, conditions listed in ACOE permit)

**Essential Fish Habitat**  
Minimal Adverse Effect (5/8/15)

**Maine Department of Conservation/Public Lands, Submerged Land Lease**  
Not Applicable

**Maine Land Use Regulation Commission**

*\*Applicable Standards and Permits are included with the contract*

**Maine Department of Environmental Protection**  
Permit by Rule (PBR)  
*\*Applicable Standards and Permits are included with the contract*

**Army Corps of Engineers, Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act.**  
Category 2 ACOE Permit# NAE-2016-199  
-Work Start Notification to be completed by ENV Field Contact or Resident and submitted to ACOE with copy to David Gardner  
-Compliance Certification Form to be completed by ENV Field Contact and submitted to David Gardner

*\*Applicable Standards and Permits are included with the contract*

**Stormwater Review**  
N/A

<input checked="" type="checkbox"/> <b>Special Provisions Required</b>		
Special Provision 105-Timing of Work Restriction	N/A <input type="checkbox"/>	Applicable <input checked="" type="checkbox"/>
Special Provision 656-Minor Soil Disturbance	N/A <input checked="" type="checkbox"/>	Applicable <input type="checkbox"/>
Standard Specification 656-Erosion Control Plan	N/A <input type="checkbox"/>	Applicable <input checked="" type="checkbox"/>
Special Provision 203-Dredge Spec	N/A <input type="checkbox"/>	Applicable <input checked="" type="checkbox"/>
Special Provision 203.33-Special Fill	N/A <input type="checkbox"/>	Applicable <input checked="" type="checkbox"/>
General Note for Hazardous Waste	N/A <input checked="" type="checkbox"/>	Applicable <input type="checkbox"/>
Special Provision 203-Hazardous Waste	N/A <input type="checkbox"/>	Applicable <input checked="" type="checkbox"/>
Special Provision 105.9	N/A <input type="checkbox"/>	Applicable <input checked="" type="checkbox"/>

*\*All permits and approvals based on plans/scope as of: 3/16/16*



**DEPARTMENT OF THE ARMY**  
 NEW ENGLAND DISTRICT, CORPS OF ENGINEERS  
 696 VIRGINIA ROAD  
 CONCORD, MASSACHUSETTS 01742-2761

REPLY TO  
 ATTENTION OF

**MAINE GENERAL PERMIT (GP)  
 AUTHORIZATION LETTER AND SCREENING SUMMARY**

Office of Environmental Services  
 Maine Department of Transportation  
 16 State House Station  
 Augusta, Maine 04333

CORPS PERMIT # NAE-2016-199  
 CORPS PGP ID# 16-040  
 STATE ID# Permit by Rule

**DESCRIPTION OF WORK:**

Place temporary and permanent fill below the ordinary high water line of Davis Brook and in freshwater wetlands at Ellsworth, Maine in conjunction with the reconstruction of U.S. Route 1A and Route 179. The project will result in approximately 410SF of temporary and 225SF of permanent stream impact; and 4,618SF of temporary and 707SF of permanent wetland impact. This work is shown on the attached plans entitled "U.S. Route 1A and Route 179, WIN# 19196.00, Ellsworth, Maine" in five (5) sheets undated. SPECIAL CONDITIONS: See attached sheet.

LAT/LONG COORDINATES: 44.5573910° N -68.4339480° W USGS QUAD: ELLSWORTH, ME

**I. CORPS DETERMINATION:**

Based on our review of the information you provided, we have determined that your project will have only minimal individual and cumulative impacts on waters and wetlands of the United States. **Your work is therefore authorized by the U.S. Army Corps of Engineers under the enclosed Federal Permit, the Maine General Permit (GP). This is your Corps Permit.**

You must perform the activity authorized herein in compliance with all the terms and conditions of the GP [including any attached Additional Conditions and any conditions placed on the State 401 Water Quality Certification including any required mitigation]. Please review the enclosed GP carefully, including the GP conditions beginning on page 5, to familiarize yourself with its contents. You are responsible for complying with all of the GP requirements; therefore you should be certain that whoever does the work fully understands all of the conditions. You may wish to discuss the conditions of this authorization with your contractor to ensure the contractor can accomplish the work in a manner that conforms to all requirements.

If you change the plans or construction methods for work within our jurisdiction, please contact us immediately to discuss modification of this authorization. This office must approve any changes before you undertake them.

Condition 38 of the GP (page 16) provides one year for completion of work that has commenced or is under contract to commence prior to the expiration of the GP on October 13, 2020. You will need to apply for reauthorization for any work within Corps jurisdiction that is not completed by October 13, 2021.

This authorization presumes the work shown on your plans noted above is in waters of the U.S. Should you desire to appeal our jurisdiction, please submit a request for an approved jurisdictional determination in writing to the undersigned.

No work may be started unless and until all other required local, State and Federal licenses and permits have been obtained. **This includes but is not limited to a Flood Hazard Development Permit issued by the town if necessary.**

**II. STATE ACTIONS: PENDING [ X ], ISSUED [ ], DENIED [ ] DATE 02/03/2016**

APPLICATION TYPE: PBR: X, TIER 1:       , TIER 2:       , TIER 3:       , NRPA: X LURC:        DMR LEASE:        NA:       

**III. FEDERAL ACTIONS:**

JOINT PROCESSING MEETING: 02/04/2016 LEVEL OF REVIEW: CATEGORY 1:        CATEGORY 2: X

AUTHORITY (Based on a review of plans and/or State/Federal applications): SEC 10       , 404 X 10/404       , 103       

EXCLUSIONS: The exclusionary criteria identified in the general permit do not apply to this project.

FEDERAL RESOURCE AGENCY OBJECTIONS: EPA NO, USF&WS NO, NMFS NO

If you have any questions on this matter, please contact my staff at 207-623-8367 at our Manchester, Maine Project Office. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at <http://per2.nwp.usace.army.mil/survey.html>

**MAHANEY.SHAW**  
 N.B.1006439302  
Digitally signed by MAHANEY.SHAW.N.B.1006439302  
 DN: c=US, o=U.S. Government, ou=DoD,  
 ou=PIG, ou=USA,  
 cn=MAHANEY.SHAW.N.B.1006439302  
 Date: 2016.02.25 09:41:27 -05'00'

**MAHANEY.SHAW**  
 N.B.1006439302  
Digitally signed by MAHANEY.SHAW.N.B.1006439302  
 DN: c=US, o=U.S. Government, ou=DoD,  
 ou=PIG, ou=USA,  
 cn=MAHANEY.SHAW.N.B.1006439302  
 Date: 2016.02.25 09:41:37 -05'00' **25 February 2016**

**SHAWN B. MAHANEY  
 SENIOR PROJECT MANAGER  
 MAINE PROJECT OFFICE**

**FOR: FRANK J. DELGIUDICE  
 CHIEF, PERMITS & ENFORCEMENT BRANCH  
 REGULATORY DIVISION** **DATE**



US Army Corps  
of Engineers  
New England District

PLEASE NOTE THE FOLLOWING GENERAL CONDITIONS FOR  
DEPARTMENT OF THE ARMY  
GENERAL PERMIT  
NO. NAE-2016-199

1. This authorization requires you to 1) notify us before beginning work so we may inspect the project, and 2) submit a Compliance Certification Form. You must complete and return the enclosed Work Start Notification Form(s) to this office at least two weeks before the anticipated starting date. You must complete and return the enclosed Compliance Certification Form within one month following the completion of the authorized work and any required mitigation (but not mitigation monitoring, which requires separate submittals).
2. The permittee shall assure that a copy of this permit is at the work site whenever work is being performed and that all personnel performing work at the site of the work authorized by this permit are fully aware of the terms and conditions of the permit. This permit, including its drawings and any appendices and other attachments, shall be made a part of any and all contracts and sub-contracts for work which affects areas of Corps of Engineers' jurisdiction at the site of the work authorized by this permit. This shall be done by including the entire permit in the specifications for the work. If the permit is issued after construction specifications but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. The term "entire permit" includes permit amendments. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions of the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps of Engineers jurisdiction.
3. The permittee shall implement the following special conditions in order to avoid and minimize effects to endangered Atlantic salmon and their designated critical habitat:
  1. The Permittee ("MaineDOT") shall hold a pre-construction meeting for each project with appropriate MaineDOT Environmental Office staff, other MaineDOT staff, and the MaineDOT construction crew or contractor(s) to review all procedures and requirements for avoiding and minimizing effects to Atlantic salmon critical habitat. The pre-con meeting shall also emphasize the importance of these measures for protecting salmon and its critical habitat. The U.S. Army Corps of Engineers, FHWA, and Service staff shall be notified of the meeting.
  2. To minimize dewatering-related fish stranding inside the cofferdam, MaineDOT (or approved consultants) shall capture and remove as many salmon (if encountered) and other fish species as possible. MaineDOT shall inspect the work areas inside the cofferdams after placement for the presence of Atlantic salmon. If Atlantic salmon are observed during construction, all activities shall cease and MaineDOT shall immediately contact the USFWS's Maine Field Office (207.566.3344).
  3. All in-stream work shall be conducted during June 15 and October 1.
  4. Best Management Practices (BMPs) shall be implemented in accordance with MaineDOT's Best Management Practices for Erosion and Sedimentation Control (2008), which outlines means and methods to prevent sedimentation into streams from construction activities or storm events.
  5. MaineDOT and their contractors shall minimize the potential for effects to Atlantic salmon critical habitat by conducting all construction activities for each project in accordance with a MaineDOT-approved Soil Erosion and Water Pollution Control Plan (SEWPCP). In stream turbidity shall be visually monitored and all erosion controls shall be inspected daily to ensure that the measures taken are adequate. If inspection shows that the erosion controls are ineffective, immediate action shall be taken to repair, replace, or reinforce controls as necessary.

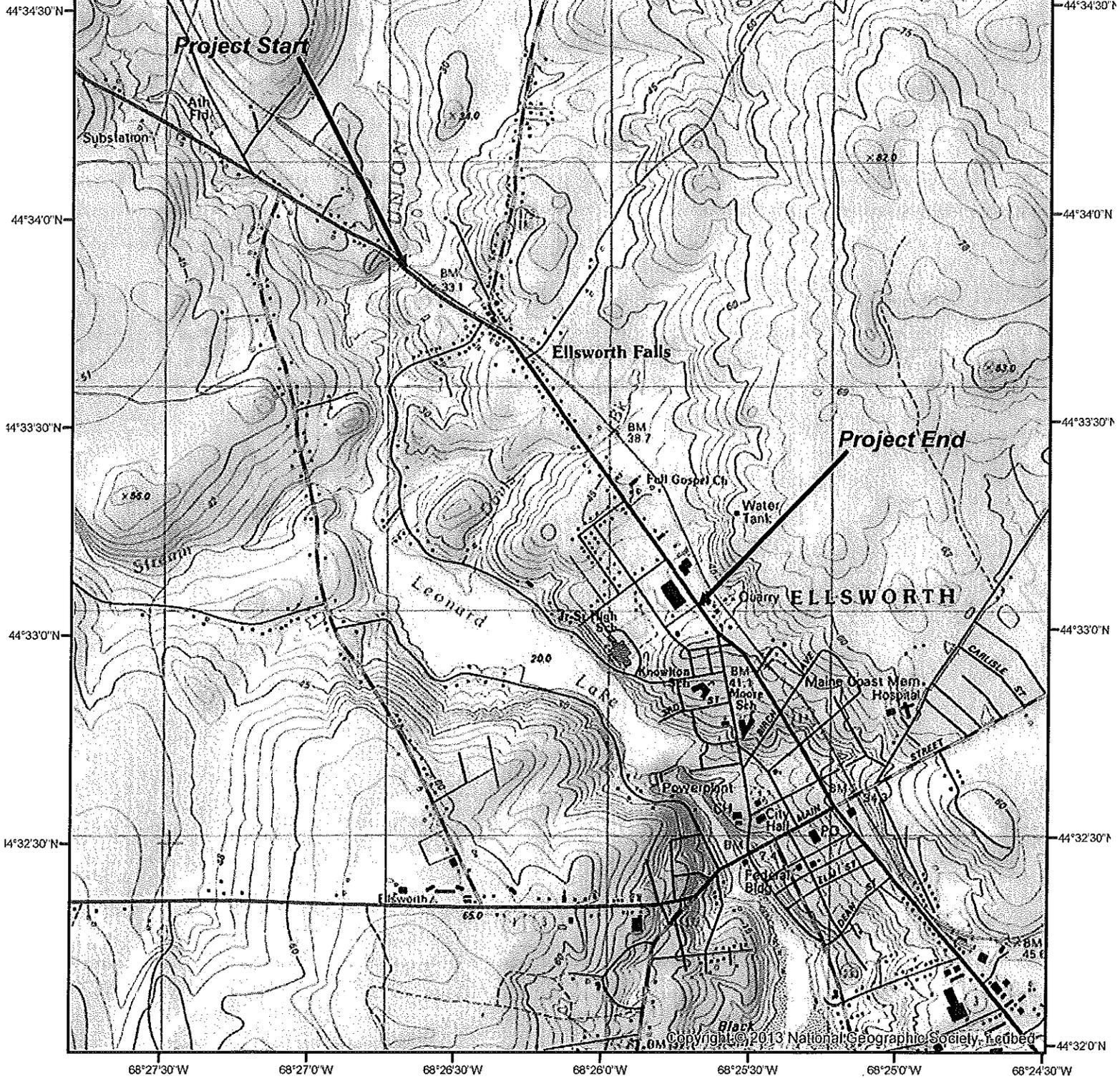


**US Army Corps  
of Engineers**  
New England District

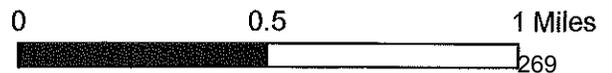
**SPECIAL CONDITIONS FOR  
DEPARTMENT OF THE ARMY  
GENERAL PERMIT  
NO. NAE-2016-199**

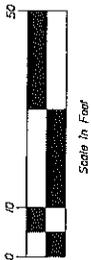
6. All areas of temporary waterway or wetland fill shall be restored to their original contour and character upon completion of the project.
7. Disturbed areas adjacent to the stream shall be stabilized and re-vegetated with a seed mix appropriate for riparian areas in Maine, except in areas where riprap has been placed.
8. To minimize the spread of noxious weeds into the riparian zone, all off-road equipment and vehicles (operating off existing open and maintained roads) must be cleaned prior to entering the construction site to remove all soil, seeds, vegetation, or other debris that could contain seeds or reproductive portions of plants. All equipment shall be inspected prior to off-loading to ensure that they are clean.
9. As a component of the Soil Erosion and Water Pollution Control Plan (SEWPCP) for each project, MaineDOT or their contractor shall develop and implement a Spill Prevention Control and Countermeasure Plan (SPCCP) designed to avoid any stream impacts from hazardous chemicals associated with construction activities, such as diesel fuel, oil, lubricants, and other hazardous materials. All refueling or other construction equipment maintenance shall be done at a location consistent with SPCCP and in a manner that avoids chemical or other hazardous materials getting into the stream. These measures include the following:
  - a. All vehicle and equipment refueling activities shall occur more than 100 feet from any water source.
  - b. All vehicles carrying fuel shall have specific equipment and materials needed to contain or clean up any incidental spills at the project site. Equipment and materials would include spill kits appropriately sized for specific quantities of fuel, shovels, absorbent pads, straw bales, containment structures and liners, and/or booms.
  - c. During use, all pumps and generators shall have appropriate spill containment structures and/or absorbent pads in place.
  - d. All equipment used for in-stream work shall be cleaned of external oil, grease, dirt, and mud. Any leaks or accumulations of these materials would be corrected before entering streams or areas that drain directly to streams or wetlands.
10. Sheet pile driving with an impact hammer is not authorized.

68°27'30"W 68°27'0"W 68°26'30"W 68°26'0"W 68°25'30"W 68°25'0"W 68°24'30"W

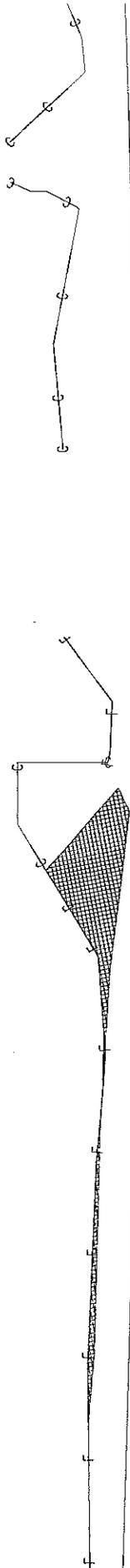


U.S. Route 1A and Route 179  
 WIN# 19196.00  
 Ellsworth, Maine  
 Sheet 1 OF 5  
 44.557391 -68.433948



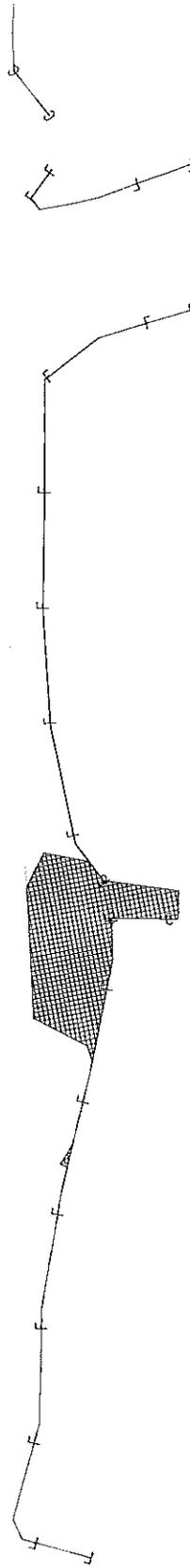


PEM IMPACTS = 546± S.F.



1321+00 1322+00 1323+00 1324+00

PSS IMPACTS = 738± S.F.



U.S. Route 1A and Route 179  
 WIN# 19196.00  
 Ellsworth, Maine  
 Sheet 2 of 5

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION

U.S. ROUTE 1A ELLSWORTH  
 HANCOCK COUNTY

SHEET NUMBER

1 270

WIN# 19196.00

PLANS

OF 3

U.S. Route 1A and Route 179  
 WIN# 19196.00  
 Ellsworth, Maine  
 Sheet 3 of 5

WIN# 19196.00

S. ROUTE 1A                      ELLSWORTH  
 HANCOCK COUNTY

SHEET NUMBER

27

271

PLANS

TEMP RUS IMPACTS (COFFERDAMS) =  $225 \pm$  S.F.

APPROX COFFERDAM LOCATION

PFO IMPACTS =  $1332 \pm$  S.F.  
 RUS IMPACTS =  $1284 \pm$  S.F.

TEMP PFO IMPACTS =  $707 \pm$  S.F.

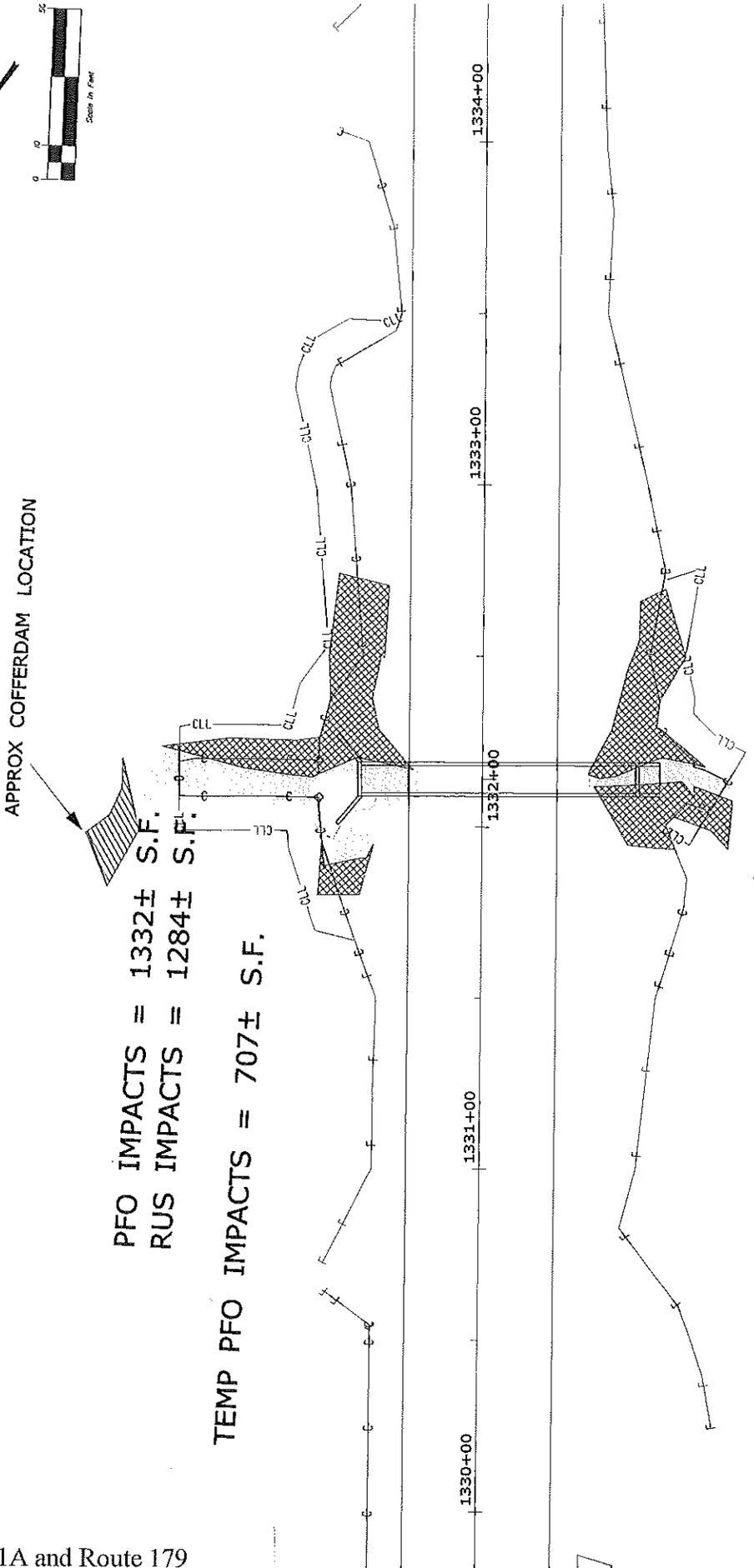
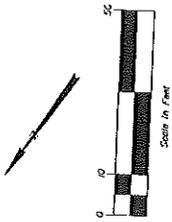
RUS IMPACTS =  $506 \pm$  S.F.

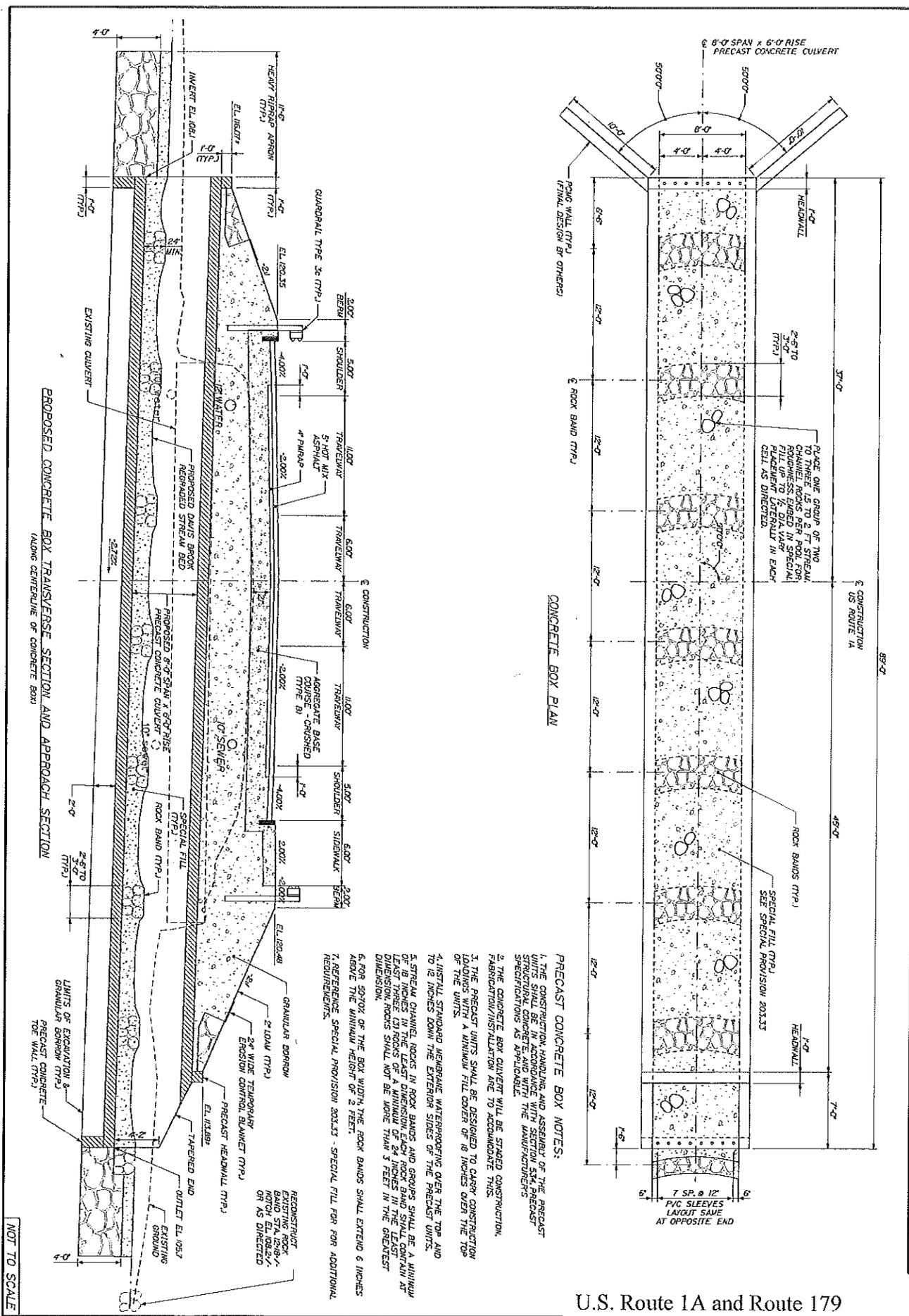
PEM IMPACTS =  $1252 \pm$  S.F.

APPROX COFFERDAM LOCATION

TOTAL RUS IMPACTS =  $1790 \pm$  S.F.  
 TOTAL PFO IMPACTS =  $1332 \pm$  S.F.  
 TOTAL PEM IMPACTS =  $1252 \pm$  S.F.  
 TOTAL TEMP RUS IMPACTS (COFFERDAMS) =  $185 \pm$  S.F.

TOTAL RUS IMPACTS (COFFERDAMS) =  $225 \pm$  S.F.





PROPOSED CONCRETE BOX TRANSVERSE SECTION AND APPROACH SECTION  
(ALONG CENTERLINE OF CONCRETE BOX)

CONCRETE BOX PLAN

PRECAST CONCRETE BOX NOTES:

1. THE CONSTRUCTION HANDLING AND ASSEMBLY OF THE PRECAST UNITS SHALL BE IN ACCORDANCE WITH SECTION 504 PRECAST CONCRETE STRUCTURES AND THE MANUFACTURER'S SPECIFICATIONS AS APPLICABLE.
2. THE CONCRETE BOX CULVERT WILL BE STAGED CONSTRUCTION. FABRICATION/INSTALLATION ARE TO ACCOMMODATE THIS.
3. THE PRECAST UNITS SHALL BE DESIGNED TO CARRY CONSTRUCTION LOADINGS WITH A MINIMUM FILL COVER OF 18 INCHES OVER THE TOP OF THE UNITS.
4. INSTALL STANDARD MEMBRANE WATERPROOFING OVER THE TOP AND TO 12 INCHES DOWN THE EXTERIOR SIDES OF THE PRECAST UNITS.
5. STREAM CHANNEL ROCKS IN ROCK BANDS AND SPURS SHALL BE A MINIMUM OF 18 INCHES IN THE LEAST DIMENSION, EACH ROCK SHALL BE A MINIMUM OF 24 INCHES IN THE LEAST DIMENSION. ROCKS SHALL NOT BE MORE THAN 3 FEET IN THE GREATEST DIMENSION.
6. FOR 50% OF THE BOX WIDTH THE ROCK BANDS SHALL EXTEND 6 INCHES ABOVE THE MINIMUM HEIGHT OF 2 FEET.
7. REFERENCE SPECIAL PROVISION 203.33 - SPECIAL FILL FOR ADDITIONAL REQUIREMENTS.

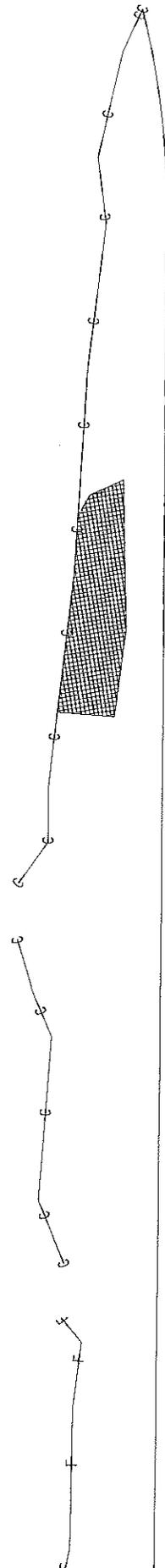
NOT TO SCALE

DESIGNER	DATE	BY	SCALE
DESIGN CHECKED			
DESIGN APPROVED			
REVISION 1			
REVISION 2			
REVISION 3			
REVISION 4			
REVISION 5			

U.S. Route 1A and Route 179  
WIN# 19196.00  
Ellsworth, Maine  
Sheet 4 of 5

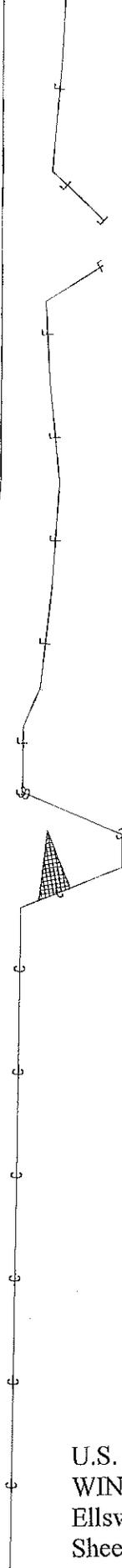


PEM IMPACTS = 690± S.F.



7+00 1348+00 1349+00 1350+00

PEM IMPACTS = 60± S.F.



U.S. Route 1A and Route 179  
 WIN# 19196.00  
 Ellsworth, Maine  
 Sheet 5 of 5

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION

U.S. ROUTE 1A ELLSWORTH  
 HANCOCK COUNTY

SHEET NUMBER

3

273

WIN# 19196.00

PLANS

OF 3



**US Army Corps  
of Engineers** ®  
New England District

(Minimum Notice: Permittee must sign and return notification  
within one month of the completion of work.)

**COMPLIANCE CERTIFICATION FORM**

USACE Project Number: NAE-2016-199

Project Manager: Mahaney

Name of Permittee: Maine DOT

Permit Issuance Date: \_\_\_\_\_

Please sign this certification and return it to the following address upon completion of the activity and any mitigation required by the permit. You must submit this after the mitigation is complete, but not the mitigation monitoring, which requires separate submittals.

\*\*\*\*\*  
 \* MAIL TO: U.S. Army Corps of Engineers, New England District \*  
 \* Permits and Enforcement Branch C, \*  
 \* Regulatory Division \*  
 \* 696 Virginia Road \*  
 \* Concord, Massachusetts 01742-2751 \*  
 \*\*\*\*\*

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

**I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the above referenced permit, and any required mitigation was completed in accordance with the permit conditions.**

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date of Work Completion

(\_\_\_\_\_) \_\_\_\_\_  
Telephone Number

(\_\_\_\_\_) \_\_\_\_\_  
Telephone Number



**US Army Corps  
of Engineers®**  
New England District

**GENERAL PERMIT  
WORK-START NOTIFICATION FORM**

**MAIL TO:** U.S. Army Corps of Engineers, New England District  
Permits and Enforcement Branch C  
Regulatory Division  
696 Virginia Road  
Concord, Massachusetts 01742-2751

A Corps of Engineers Permit (**NAE-2016-199**) was issued to **Maine DOT**. The permit authorized the permittee(s) to **place temporary and permanent fill below the ordinary high water line of Davis Brook and in freshwater wetlands at Ellsworth, Maine in conjunction with the reconstruction of U.S. Route 1A and Route 179. WIN# 19196.00**

The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Person/Firm: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Business Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone: ( ) \_\_\_\_\_ ( ) \_\_\_\_\_

Proposed Work Dates: **Start:** \_\_\_\_\_

**Finish:** \_\_\_\_\_

PERMITTEE'S SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

*FOR USE BY THE CORPS OF ENGINEERS*

PM MAHANEY Submittals Required: No

Inspection Recommendation: Random MEGP compliance

**DEPARTMENT OF THE ARMY  
GENERAL PERMIT FOR  
THE STATE OF MAINE**

The New England District of the U.S. Army Corps of Engineers (Corps) hereby issues a General Permit (GP) for activities subject to Corps jurisdiction in waters of the U.S. within the boundaries of the State of Maine. This GP is issued in accordance with Corps regulations at 33 CFR 320 - 332 [see 33 CFR 325.2(e)(2)]. This GP authorizes activity-specific categories of work that are similar in nature and cause no more than minimal individual and cumulative adverse environmental impacts. Refer to Page 2 for the list of activities and Appendix A for activity specific conditions of eligibility in inland and tidal waters.

**I. GENERAL CRITERIA**

1. In order for activities to qualify for this GP, they must meet the GP's terms and eligibility criteria (Pages 1–4), General Conditions (GC) (Pages 5 – 20), and Appendix A - Definition of Categories.
2. Under this GP, projects may qualify for the following:
  - Category 1: Category 1 Self -Verification Notification Form is required (SVNF – see Appendix B).
  - Category 2: Application to and written approval from the Corps is required (Pre-Construction Notification (PCN)). No work may proceed until written approval from the Corps is received.

If your project is ineligible for Category 1, it may qualify for Category 2 or an Individual Permit and you must submit an application (see Page 3). The thresholds for activities eligible for Categories 1 and 2 are defined in Appendix A. This GP does not affect the Corps Individual Permit review process or activities exempt from Corps regulation.

3. Prospective permittees need to read:
  - a. Section II to determine if the activity requires Corps authorization.
  - b. Sections III and IV to determine if the activity may be eligible for authorization under this GP, specifically whether it is eligible for Self-Verification (SV) or whether Pre-Construction Notification (PCN) is required.
4. Permittees must ensure compliance with all applicable General Conditions in Section IV. The Corps will consider unauthorized any activity requiring Corps authorization if that activity is under construction or completed and does not comply with all of the terms and conditions.
5. Project proponents are encouraged to contact the Corps with questions at any time. Pre-application meetings (see 33 CFR 325.1(b)), whether arranged by the Corps or requested by permit applicants, are encouraged to facilitate the review of projects. Pre-application meetings and/or site visits can help streamline the permit process by alerting the applicant to potentially time-consuming concerns that are likely to arise during the evaluation of their project (e.g., avoidance, minimization and compensatory mitigation requirements, historic properties, endangered species, essential fish habitat, and dredging contaminated sediments).

## II. CORPS JURISDICTION/ACTIVITIES COVERED

1. Permits are required from the Corps of Engineers for the following work:
  - a. The construction of any structure in, over or under any navigable water of the United States (U.S.)<sup>1</sup>, the excavating or dredging from or depositing of material in such waters, or the accomplishment of any other work affecting the course, location, condition, or capacity of such waters. The Corps regulates these activities under Section 10 of the Rivers and Harbors Act of 1899. See 33 CFR 322;
  - b. The discharge of dredged or fill material and certain discharges associated with excavation into waters of the U.S. (e.g. sidcasting). The Corps regulates these activities under Section 404 of the Clean Water Act (CWA). See 33 CFR 323; and
  - c. The transportation of dredged material for the purpose of disposal in the ocean. The Corps regulates these activities under Section 103 of the Marine Protection, Research and Sanctuaries Act. See 33 CFR 324.
2. Related laws:

33 CFR 320.3 includes a list of related laws, including: Section 401 of the CWA, Section 402 of the CWA, Section 307(c) of the Coastal Zone Management (CZM) Act of 1972, The National Historic Preservation Act of 1966, the Endangered Species Act, the Fish and Wildlife Act of 1956, the Marine Mammal Protection Act of 1972, Magnuson-Stevens Act, and Section 7(a) of the Wild and Scenic Rivers Act.
3. An activity listed below may be authorized by this GP only if that activity and the permittee satisfy all of the GP's terms and conditions. Any activity not specifically listed below may still be eligible for the GP; applicants are advised to contact the Corps for a specific eligibility determination. Category 1 and Category 2 eligibility criteria for each activity in both Inland and Tidal waters can be found in Appendix A.

1. Repair, Replacement, Expansion, and Maintenance of Authorized Structures and Fills
2. Moorings
3. Structures, Floats and Lifts
4. Aids to Navigation, and Temporary Recreational Structures
5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation
6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges
7. Bank and Shoreline Stabilization
8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities
9. Utility Line Activities
10. Linear Transportation Projects
11. Mining Activities
12. Boat Ramps and Marine Railways
13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects
14. Reshaping Existing Drainage Ditches and Mosquito Management
15. Oil Spill and Hazardous Material Cleanup
16. Cleanup of Hazardous and Toxic Waste
17. Scientific Measurement Devices
18. Survey Activities
19. Agricultural Activities
20. Fish and Wildlife Harvesting, Enhancement, and Attraction Devices
21. Habitat Restoration, Establishment and Enhancement Activities
22. Previously Authorized Activities
23. Stream & Wetland Crossings
24. Aquaculture

Note: Multiple activities may be authorized in the same GP, e.g. a recreational pier (#3) with an associated mooring (#2) or a windpower facility (#13) with an associated transmission line (#9).

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<sup>1</sup> Defined in Appendix F, Definitions and at 33 CFR 328.  
Section II

### III. PROCEDURES

1. State Approvals. Applicants are responsible for applying for and obtaining any of the required state or local approvals. Federal and state jurisdictions may differ in some instances. State permits may be required for specific projects regardless of the general permit category.

In order for authorizations under this GP to be valid, when any of the following state approvals or statutorily-required reviews is also required, the approvals must be obtained prior to the commencement of work in Corps jurisdiction.

- Maine Department of Environmental Protection (DEP): Natural Resources Protection Act (NRPA) permit, including permit-by-rule (PBR) and general permit authorizations; Site Location of Development Act permit; Maine Waterway Development and Conservation Act permit; and Maine Hazardous Waste, Septage, and Solid Waste Management Act license.
- Maine Department of Conservation, Agriculture & Forestry: Land Use Planning Commission (LUPC) permit.
- Maine Department of Marine Resources: Aquaculture Leases.
- Maine Department of Conservation, Bureau of Parks and Lands, Submerged Lands: Submerged Lands Lease.

**NOTE: This GP may also be used to authorize projects that are not regulated by the State of Maine (e.g., certain seasonal floats or moorings).**

2. How to Obtain/Apply for Authorization.

a. Category 1 (**Self-Verification**): Self-Verification Notification Form (SVNF) required. The SVNF is required for all SV eligible work in Maine unless otherwise stated in Appendix A. Activities that are eligible for SV are authorized under this GP and may commence without written verification from the Corps provided the prospective permittee has:

i. Confirmed that the activity will meet the terms and conditions of Category 1. Consultation with the Corps and/or other relevant federal and state agencies may be necessary to ensure compliance with the applicable general conditions (GCs) and related federal laws such as the National Historic Preservation Act (see GC 6), the Endangered Species Act (GC 8) and the Wild and Scenic Rivers Act (GC 9). Prospective permittees are encouraged to contact the Corps with SV eligibility questions. Activities not meeting the SV criteria must submit a PCN to the Corps.

ii. Submitted the SVNF (see GC 27 and Appendix B) to the Corps. **NOTE: A copy of a state permit application form may be an acceptable surrogate for the SVNF. Whichever form chosen needs to include a location map, plans, and an Official Species List for federally listed threatened or endangered species (Reference Appendix D).**

b. Category 2 (**Pre-Construction Notification (PCN)**): Application to and written verification from the Corps is required before work can proceed. For activities that do not qualify for SV or where otherwise required by the terms of the GP, the permittee must submit a PCN and obtain a written permit before starting work in Corps jurisdiction.

i. The Corps will coordinate review of all activities requiring PCN with federal and state agencies and federally recognized tribes, as appropriate. To be eligible and subsequently authorized, an activity must result in no more than minimal individual and cumulative effects on the aquatic environment as determined by the Corps in accordance with the criteria listed within this GP. This may require project modifications involving avoidance, minimization, or compensatory mitigation for unavoidable impacts to ensure that the net adverse effects of a project are no more than minimal.

ii. The Corps will attempt to issue a written eligibility determination within the state's review period. Regardless, work eligible for Category 2 may not proceed before Corps written approval is received.

c. All applicants for Category 2 projects must:

- i. Apply directly to the Corps using the state application form or the Corps application form (ENG Form 4345<sup>2</sup>), and apply directly to the state (DEP, LUPC, BPL or DMR) as applicable using the appropriate state form, if the work is regulated by the Corps and the state; or
  - ii. Apply directly to the Corps using the Corps application form (ENG Form 4345<sup>2</sup>) if the work is regulated by the Corps but not the state (DEP, LUPC, BPL or DMR).
  - iii. Provide application information (see “Information Typically Required” in Appendix C) to help ensure the application is complete and to speed project review.
  - iv. Obtain an Official Species List of federally threatened or endangered species in the project area (GC 8).
  - v. Submit a copy of their application materials to the Maine Historic Preservation Commission (MHPC) *and all five Indian tribes* listed at Appendix E, at the same time, or before, they apply to the Corps, to be reviewed for the presence of historic, archaeological or tribal resources in the permit area that the proposed work may affect. Submittals to the Corps shall include information to indicate that this has been done (a copy of the applicant’s cover letter to MHPC and tribes or a copy of the MHPC and tribal response letters is acceptable).
- d. Work that is not regulated by the State of Maine, but is subject to Corps jurisdiction, may still be eligible for authorization under this GP.

**e. Emergency Situations:** 33 CFR 325.2(e)4 states that an “emergency” is a situation which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process the application under standard procedures.” Emergency work is subject to the same terms and conditions of this GP as non-emergency work, and similarly, must qualify for authorization under the GP; otherwise an IP is required. The Corps will work with all applicable agencies to expedite verification according to established procedures in emergency situations.

3. Individual Permits. Projects that are not authorized by this GP require an Individual Permit (IP) (33 CFR 325.5) and proponents must submit an application directly to the Corps. This GP does not affect the Corps IP review process or activities exempt from Corps regulation. For general information and application form, see the Corps website or contact the Corps (see Appendix E). The Corps encourages applicants to apply concurrently for a Corps IP and applicable state permits.

The Corps retains discretionary authority on a case-by-case basis to elevate a GP eligible project to an IP based on concerns for the aquatic environment or for any other factor of the public interest [33 CFR 320.4(a)]. Whenever the Corps notifies an applicant that an IP is required, no work in Corps jurisdiction may be conducted until the Corps issues the required authorization in writing indicating that work may proceed.

4. Enforcement/Non-Compliance. Work performed without the required Corps of Engineers permits is subject to administrative, civil, and criminal penalties. The Corps will evaluate unauthorized activities for enforcement action under 33 CFR 326.

The Corps will consider unauthorized any activity requiring Corps authorization if that activity is under construction or completed and does not comply with all of the terms and conditions of a GP or an IP. The Corps may elect to suspend enforcement proceedings if the permittee modifies his project to comply with a GP.

After considering whether a violation was knowing or intentional, and other indications of the need for a penalty, the Corps can elect to terminate an enforcement proceeding with an after-the- fact authorization under a GP, if all terms and conditions of the GP have been satisfied, either before or after the activity has been accomplished.

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<sup>2</sup> Located at [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) under “Forms & Publications.”  
Section III

#### **IV. GENERAL CONDITIONS**

To qualify for GP authorization, the prospective permittee must comply with the following general conditions, as applicable.

1. Other Permits
2. Federal Jurisdictional Boundaries
3. Minimal Direct, Secondary, and Cumulative Impacts
4. Mitigation (Avoidance, Minimization, and Compensatory Mitigation)
5. Single and Complete Projects
6. Historic Properties
7. Corps Projects and Property
8. Federal Threatened and Endangered Species
9. Wild and Scenic Rivers
10. Navigation
11. Federal Liability
12. Utility Line Installation and Removal
13. Heavy Equipment in Wetlands or Mudflats
14. Temporary Fill
15. Restoration of Special Aquatic Sites (including wetland areas).
16. Soil Erosion, Sediment and Turbidity Controls
17. Time of Year Windows/Restrictions.
18. Aquatic Life Movements & Management of Water Flows
19. Water Quality and Coastal Zone Management
20. Floodplains and Floodways
21. Storage of Seasonal Structures
22. Spawning, Breeding, and Migratory Areas
23. Vernal Pools
24. Invasive and Other Unacceptable Species
25. Programmatic Agreements
26. Permit On-Site
27. Self-Verification Notification Form (SVNF)
28. Inspections
29. Maintenance
30. Property Rights
31. Transfer of GP Verifications
32. Modification, Suspension, and Revocation
33. Special Conditions
34. False or Incomplete Information
35. Abandonment
36. Enforcement Cases
37. Duration of Authorization
38. Previously Authorized Activities
39. Discretionary Authority
40. St. John/St. Croix Rivers.
41. National Lands
42. Essential Fish Habitat (EFH)
43. Work Site Restoration
44. Bank Stabilization
45. Stream Work & Crossings and Wetland Crossings

**1. Other Permits.** Permittees must obtain other federal, state, or local authorizations required by law. Applicants are responsible for applying for and obtaining all required state or local approvals. This includes, but is not limited to, the project proponent obtaining a Flood Hazard Development Permit issued by the town, if necessary. Inquiries may be directed to the municipality or to the Maine Floodplain Management Coordinator at (207) 287-8063. See <http://www.maine.gov/dacf/flood/>

**2. Federal Jurisdictional Boundaries**

a. Applicability of this GP shall be evaluated with reference to federal jurisdictional boundaries. Applicants are responsible for ensuring that the boundaries used satisfy the federal criteria defined at 33 CFR 328 “Waters of the U.S.” and 33 CFR 329 “Navigable Waters of the U.S.”

NOTE: Waters of the U.S. include the subcategories “navigable waters of the U.S.” and “wetlands.”

b. For Category 1 projects, proponents are not required to delineate the waters of the U.S. that they plan to impact, but must approximate the square footage of impacts in order to determine the review category (1 or 2 or Individual Permit). For projects filling <15,000 square feet (SF) of waters of the U.S. that do not qualify for Category 1 (e.g., vernal pool, secondary or endangered species impacts, etc.) and therefore require an application to the Corps (PCN), and for those filling ≥15,000 SF, applicants shall delineate all waters of the U.S. that will be filled (direct impacts) in accordance with the Corps of Engineers Wetlands Delineation Manual and the most recent regional supplement (see Appendix C). In addition, applicants shall approximately identify all waters of the U.S. on the property and *known* waters adjacent to the property in order for the Corps to evaluate secondary impacts. The waters of the U.S. shall be clearly shown on the project plans submitted with the application. This includes all waters of the U.S. in areas under DEP or LUPC jurisdiction regardless of whether they’re shown on LUPC zoning maps.

c. On a case-by-case basis, the Corps may modify/refine the above delineation and identification requirements for waters of the U.S. See [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) >> Jurisdictional Limits and Wetlands for more information on delineating jurisdictional areas.

**3. Minimal Direct, Secondary, and Cumulative Effects<sup>3</sup>**

a. Projects authorized by this GP shall have no more than minimal direct, secondary and cumulative adverse environmental impacts. Category 2 applicants should provide information on secondary and cumulative impacts as stated in Appendix C. Compensatory mitigation may be required to offset unavoidable impacts (see GC 4) and to ensure that they are no more than minimal. Compensatory mitigation requirements will be determined on a case-by-case basis.

b. Secondary impacts to waterway and/or wetland areas, (e.g., areas drained, flooded, cleared, excavated or fragmented) shall be added to the total fill area when determining whether the project qualifies for Category 1 or 2. Direct, secondary and cumulative impacts are defined at Appendix A, Endnote 2 and Appendix F.

c. Site clearing, grading and construction activities in the upland habitat surrounding vernal pools (“Vernal Pool Management Areas”) are secondary impacts. See GC 23 for avoidance and minimization requirements and recommendations.

d. Bank stabilization activities in tidal waters are provided at Appendix A, Page 30. Direct impacts in tidal waters from contiguous bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.

**4. Mitigation (Avoidance, Minimization, and Compensatory Mitigation)**

a. Discharges of dredged or fill material into waters of the U.S., including wetlands, shall be avoided and minimized to the maximum extent practicable through consideration of alternatives. The Corps may require compensatory mitigation of unavoidable direct and secondary impacts associated with Category 2 projects on a case-by-case basis.

b. Applicants proposing work in jurisdictional waters should consider riparian/forested buffers for stormwater management and low impact development (LID) best management practices (BMPs) to reduce

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<sup>3</sup> Direct, secondary and cumulative effects are defined at Appendix F, Definitions and Acronyms.

impervious cover and manage stormwater to minimize secondary impacts to aquatic resources to the maximum extent practicable.<sup>4</sup>

c. Compensatory mitigation<sup>5</sup> for effects to waters of the U.S., including direct, secondary and temporal<sup>6</sup>, may be required for permanent impacts that exceed the SV area limits, and may be required for temporary impacts that exceed the SV area limits, to offset unavoidable impacts which remain after all appropriate and practicable avoidance and minimization has been achieved and to ensure that the adverse effects to the aquatic environment are no more than minimal. Proactive restoration projects or temporary impact work with no lasting secondary effects may generally be excluded from this requirement. Refer to Appendix G.

## **5. Single and Complete Projects<sup>7</sup>**

a. This GP shall not be used to piecemeal work and shall be applied to single and complete projects. When determining the review category in Appendix A (Category 1 or 2) for a single and complete project, proponents must include any permanent historic fill placed since October 1995 that is associated with that project and all currently proposed temporary and permanent impact areas.

b. A single and complete project must have independent utility<sup>7</sup>.

c. Unless the Corps determines the activity has independent utility:

i. This GP shall not be used for any activity that is part of an overall project for which an Individual Permit is required.

ii. All components of a single project and/or all planned phases of a multi-phased project (e.g., subdivisions should include all work such as roads, utilities, and lot development) shall be treated together as constituting one single and complete project.

d. For linear projects, such as power lines or pipelines with multiple crossings, the single and complete project is all crossings of a single water of the U.S. (i.e., single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly-shaped wetland or lake, etc., are not separate waterbodies and crossings of such features cannot be considered separately. If any crossing requires a Category 2 activity, then the entire linear project shall be reviewed as one project under Category 2.

## **6. Historic Properties**

a. No undertaking shall cause effects (defined at 33 CFR 325 Appendix C and 36 CFR 800) on properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places<sup>8</sup>, including previously unknown historic properties within the permit area, unless the Corps or another Federal action agency has satisfied the consultation requirements of Section 106 of the National Historic Preservation Act (NHPA). The State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO) and the National Register of Historic Places can assist with locating information on: i) previously identified historic properties; and ii) areas with potential for the presence of historic resources, which may require identification and evaluation by qualified historic preservation and/or archaeological consultants in consultation with the Corps and the SHPO and/or THPO(s).

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<sup>4</sup> See: [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) >> State General Permit >> Permit Resources >> Mitigation for this additional information: a) "Wetland BMP Manual - Techniques for Avoidance & Minimization," b) riparian/forested buffer BMPs, and c) LID BMPs. LID BMPs include, but are not limited to: replacing curbs and gutters with swales; using an open space design for subdivisions; using permeable, pervious or porous pavements; constructing bio-retention systems; and/or, adding a green roof or rain garden.

<sup>5</sup> Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR 332. See also the New England District Compensatory Mitigation Guidance at [www.nae.usace.army.mil/regulatory](http://www.nae.usace.army.mil/regulatory) >> Mitigation.

<sup>6</sup> Temporal loss: The time lag between the loss of aquatic resource functions caused by the permitted impacts and the replacement of aquatic resource functions at the compensatory mitigation site(s) (33 CFR 332.2).

<sup>7</sup> Single and Complete Project and Independent Utility are defined in Appendix F - Definitions.

<sup>8</sup> The majority of historic properties are not listed on the National Register of Historic Places and may require identification and evaluation by qualified historic preservation and/or archaeological consultants in consultation with the Corps and the SHPO and/or THPO(s).

b. For activities eligible for SV, proponents must ensure and document that the activity will not cause effects as stated in 6(a). Proponents must submit a PCN if the authorized activity may cause effects as stated in 6(a) as soon as possible to ensure that the Corps is aware of any potential effects of the permitted activity on any historic property to ensure all Section 106 requirements are met.

c. All PCNs shall: i) show notification to the SHPO and applicable THPO(s)<sup>9</sup> for their identification of historic properties, ii) state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties, and iii) include any available documentation from the SHPO or THPO(s) indicating that there are or are not historic properties affected. Starting consultation early in project planning can save proponents time and money.

d. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

## 7. Corps Projects and Property

a. In addition to any authorization under this GP, proponents must contact the Corps Real Estate Division at (978) 318-8585 for work occurring on or potentially affecting Corps properties and/or Corps-controlled easements to initiate reviews and determine what real estate instruments are necessary to perform work. Permittees may not commence work on Corps properties and/or Corps-controlled easements until they have received any required Corps real estate documents evidencing site-specific permission to work.

b. Any proposed temporary or permanent alteration, or modification or use, including occupation, of a federal project (including but not limited to a levee, dike, floodwall, channel, anchorage, breakwater, seawall, bulkhead, jetty, wharf, pier or other work built but not necessarily owned by the United States), which would obstruct or impair the usefulness of the federal project in any manner, and/or would involve changes to the authorized federal project's scope, purpose, and/or functioning that go beyond minor modifications required for normal operations and maintenance, is not eligible for SV and requires review and approval by the Corps pursuant to 33 USC 408. Where Section 408 is applicable, a decision on a Department of the Army general permit application will not be rendered prior to the decision on a Section 408 request.

c. Any structure or work within any Corps Federal Navigation Project (FNP) or its buffer zone<sup>10</sup>, shall be subject to removal at the owner's expense prior to any future Corps dredging or the performance of periodic hydrographic surveys. See GC 10 for more requirements related to FNPs.

## 8. Federal Threatened and Endangered Species

a. No activity is authorized which: i) is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species; ii) "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed; or iii) violates the ESA.

b. **All applicants must request an Official Species List from the US Fish & Wildlife Service and must include the list in the Corps permit application. To request an Official Species List, refer to the instructions in Appendix D.**

c. **For federally listed species in tidal waters, applicants should contact the National Marine Fisheries Service at: <http://www.greateratlantic.fisheries.noaa.gov/protected/section7/>**

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<sup>9</sup> Appendix E, 3(a)&(b). Historic Resources, provides contact information and each tribe's "area of concern."

<sup>10</sup> See Appendix H for a list of FNPs. The buffer zone is equal to three times the authorized depth of the FNP.

d. A PCN is required if a threatened or endangered species, a species proposed for listing as threatened or endangered, or designated or proposed critical habitat (all hereinafter referred to as “listed species or habitat”), as identified under the ESA, is present in the action area<sup>11</sup>.

e. Federal agencies should follow their own procedures for complying with the requirements of the ESA but should coordinate that consultation with the Corps as well.

**9. Wild and Scenic Rivers.**<sup>12</sup> Any activity that occurs in the designated main stem of, within 0.25 mile up or downstream of the designated main stem of, or in tributaries within .25 miles of the designated main stem of a National Wild and Scenic River, or in “bordering and contiguous wetlands” (see Appendix A, Endnote 1) that are adjacent to the designated main stem of a National Wild and Scenic River, or that has the potential to alter flows within a river within the National Wild and Scenic River System, is not eligible for Category 1 regardless of size of the impacts. This condition applies to both designated Wild and Scenic Rivers and rivers officially designated by Congress as study rivers for possible inclusion while such rivers are in an official study status. National Wild and Scenic Rivers System segments for Maine as of October 2015 include: Allagash River beginning at Telos Dam continuing to Allagash checkpoint at Eliza Hole Rapids, approximately 3 miles upstream of the confluence with the St. John River (length = 92 miles); and 11.25 miles of the York River, in the State of Maine, from its headwaters at York Pond to the mouth of the river at York Harbor, plus its tributaries (currently under study).

## **10. Navigation**

a. Any structure or work that extends closer to the horizontal limits of any Corps Federal Navigation Project (see Appendix H) than a distance of three times the project’s authorized depth shall be subject to removal at the owner’s expense prior to any future Corps dredging or the performance of periodic hydrographic surveys. This is applicable to Category 1 and 2. Reference Appendix A, Page 28 (Moorings) and Page 29 (Structures, Floats & Lifts).

b. There shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein, and no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein.

c. The permittee understands and agrees that if future U.S. operations require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

d. A PCN is required for all work in, over or under an FNP or its buffer zone unless otherwise indicated in Appendix A. (Reference Appendix A, Endnote 13, Page 36)

**11. Federal Liability.** In issuing this permit, the Federal Government does not assume any liability for the following: (a) damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; (b) damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the U.S. in the public interest; (c) damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit; (d) design or construction deficiencies associated with the permitted work; (e) damage claims associated with any future modification, suspension, or revocation of this permit.

## **12. Utility Line Installation and Removal**

a. Subsurface utility lines shall remain subsurface. If it is necessary to discharge dredged or filled material not previously authorized in order to keep such utility lines buried or restore them to their original subsurface condition, a PCN and written verification from the Corps may be required (e.g., in the case of side

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<sup>11</sup> The “Endangered Species Consultation Handbook – Procedures for Conducting Consultation and Conference Activities Under Section 7 of the ESA,” defines action area as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. [50 CFR 402.02].”

<sup>12</sup> Additional information can be found at: <http://www.rivers.gov>.

casting into wetlands from utility trenches). Certain repair, replacement or maintenance activities may be eligible for Category 1 – refer to Appendix A.

b. Subsurface utility lines must be installed at a sufficient depth to avoid damage from anchors, dredging, etc., and to prevent exposure from erosion and stream adjustment. In accordance with Corps New England District Regulation NEDER 1110-1-9 ([www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) >> [Useful Links and Documents](#)), as an absolute minimum, the bottom cover associated with the initial installation of utility lines under navigable waters and navigation channels shall be 48 inches in soil or 24 inches in rock excavation in competent rock unless specified in a written determination. These minimum bottom cover requirements for pipelines and cables shall be measured from the maximum depth of dredging to the top of the utility. The maximum depth of dredging, in waterways having existing FNPs, is generally considered to be the authorized project depth plus any allowance for advanced maintenance and the allowable overdepth for dredging tolerances. In waterways that do not have existing FNPs, this depth should be taken as two feet below the existing bottom or maximum depth of proposed dredging, as applicable.

c. Aerial utility lines that cross navigable waters must meet minimum clearances. See 33CFR322.5(i).

d. For horizontal directional drilling work, returns of drilling fluids to the surface (i.e., frac-outs) are not authorized and require restoration to the maximum extent practicable in accordance with the terms and conditions of this GP. The permittee and its contractor shall have onsite and shall implement the procedures detailed in a frac-out contingency plan for monitoring drilling operations and for the immediate containment, control and recovery/removal of drilling fluids released into the environment should a discharge of material occur during drilling operations.

e. Within the context of any new installations, any abandoned or inactive utility lines should be removed and faulty lines (e.g., leaking hazardous substances, petroleum products, etc.) should be removed or repaired to the extent practicable. A PCN and written verification from the Corps is required if they are to remain in place, e.g., to protect sensitive areas or ensure safety.

f. No work shall drain a water of the U.S. by providing a conduit for water on or below the surface. Trench plugs installed along pipelines may be effective.

**13. Heavy Equipment in Wetlands or Mudflats.** Operating heavy equipment other than fixed equipment (drill rigs, fixed cranes, etc.) within wetlands shall be minimized, and such equipment shall not be stored, maintained or repaired in wetlands, to the maximum extent practicable. Where construction requires heavy equipment operation in wetlands, the equipment shall either have low ground pressure (typically <3 psi), or it shall be placed on swamp/construction/timber mats (herein referred to as “construction mats” and defined at Appendix A, Endnote 4) that are adequate to support the equipment in such a way as to minimize disturbance of wetland soil and vegetation. Construction mats are to be placed in the wetland from the upland or from equipment positioned on swamp mats if working within a wetland. Dragging construction mats into position is prohibited. Other support structures that are capable of safely supporting equipment may be used with written Corps authorization (Category 2 authorization or Individual Permit). Similarly, the permittee may request written authorization from the Corps to waive use of mats during frozen, dry or other conditions. An adequate supply of spill containment equipment shall be maintained on site. Construction mats should be managed in accordance with the Construction Mat BMPs at [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) >> State General Permits >> Permit Resources.

**14. Temporary Fill.** Temporary fill that qualifies for Category 1 (e.g., <15,000 SF of combined temporary and permanent fill associated with the single and complete project) or is authorized in writing under Category 2, shall adhere to the following:

a. All temporary fill and disturbed soils shall be stabilized to prevent its eroding into waters of the U.S. where it is not authorized. Work shall include phased or staged development to ensure only areas under active development are exposed and to allow for stabilization practices as soon as practicable, typically within three calendar days after disturbance. Accelerated stabilization (the providing of temporary or permanent cover by the end of the work day to prevent erosion) shall be employed as necessary. Temporary fill must be placed in a manner that will prevent it from being eroded by expected high flows.

b. Unconfined temporary fill authorized for discharge into waters of the U.S. (e.g., temporary stream crossings) shall consist of material that minimizes impacts to water quality (e.g. washed stone, stone, etc.).

c. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Place materials in a location and manner that does not adversely impact surface or subsurface water flow into or out of the wetland. Temporary fill authorized for discharge into wetlands shall be placed on geotextile fabric or other appropriate material laid on the pre-construction wetland grade where practicable to minimize impacts and to facilitate restoration to the original grade. Construction mats are excluded from this requirement.

d. Temporary fill, construction mats and corduroy roads shall be entirely removed as soon as they are no longer needed to construct the authorized work. Temporary fill shall be placed in its original location or disposed of at an upland site and suitably contained to prevent its subsequent erosion into waters of the U.S. To qualify for Category 1, temporary fill placed during the: i.) growing season must be removed before the beginning of the next growing season; and ii.) non-growing season may remain throughout the following growing season, but must be removed before the beginning of the next growing season.

e. Temporary fill, construction mats and corduroy roads are considered temporary only if they are removed as soon as they are no longer needed to construct the authorized work.

f. Construction debris and/or deteriorated materials shall not be located in waters of the U.S.

#### **15. Restoration of Special Aquatic Sites (Including Wetland Areas)**

a. Temporary fills must be removed in their entirety and the affected areas restored to their pre-construction condition, function and elevation. Restoration shall typically commence no later than the completion of construction.

b. For excavated areas, “restored to pre-construction condition, function and elevation” means careful removal of existing soil and vegetation, separate topsoil and subsoil stockpiling, soil protection, and replacement back to the original location such that the original soil layering and vegetation schemes are approximately the same, unless otherwise authorized. Plan for natural settling that will occur (the initial post-restoration elevation of the backfilled areas should be above the desired final grade as topsoil may settle by 33% to 50%), minimize compaction, and ensure that topsoil is void of gravel and subsoil. A minimum of 4 inches of topsoil should be at the surface after the soil has settled. Wetland areas temporarily disturbed shall be stabilized (e.g., seeded or planted). Seed mixes and vegetation shall include only plant species native to New England and shall not include any species listed as “Invasive and Other Unacceptable Plant Species” in the “New England District Compensatory Mitigation Guidance” (see GC 24 and refer to Appendix G). This list may be updated periodically.

c. Limit compaction to the minimum needed to promote a successful seedbed; avoid a ‘fluffy’ seedbed, which is susceptible to erosion until the plants get established, and a compacted topsoil layer, which is counter-productive and will lead to greater erosion susceptibility down the road. Test soils for compaction. A soil probe, auger, or shovel should be able to retrieve samples of post-restoration profile. Equipment refusal shall be considered a failure of restoration, in which case the soil should be restored through deep-ripping and/or de-compaction, or other appropriate methods, and wetland hydrology must be maintained. See the BMPs at [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) >> State General Permits >> Permit Resources >> Restoration.

d. In areas of authorized temporary disturbance, cut woody vegetation (trees, shrubs, etc.) shall be cut at or above ground level and not uprooted in order to prevent disruption to the wetland soil structure and to allow stump sprouts to revegetate the work area, unless otherwise authorized.

e. Trenches shall be constructed or backfilled so that the trench does not drain waters of the U.S. (e.g., materials or methods that create a French drain effect).

#### **16. Soil Erosion, Sediment and Turbidity Controls**

a. Adequate sedimentation and erosion control management measures, practices and devices, such as phased construction, installation of sediment control barriers (i.e. silt fence, vegetated filter strips, geotextile silt fences, erosion control mixes, hay bales or other devices) downhill of all exposed areas, retention of existing vegetated buffers, application of temporary mulching during construction, and permanent seeding and stabilization shall be installed and properly maintained to reduce erosion and retain sediment on-site during and after construction. They shall be capable of preventing erosion; of collecting sediment, suspended and floating materials; and of filtering fine sediment.

- b. Temporary sediment control barriers shall be removed upon completion of work, but not until all disturbed areas are permanently stabilized. The sediment collected by these sediment barriers shall be removed and placed at an upland location and stabilized to prevent its later erosion into a waterway or wetland.
- c. All exposed soil and other fills shall be permanently stabilized at the earliest practicable date .

**17. Time of Year Work Windows/Restrictions.** For activities where work is authorized in streams and tidal waters that causes turbidity or sediment re-suspension or other construction related disturbances, work must be conducted during the following TOY work windows (not during the TOY restrictions) unless otherwise authorized by the Corps under Category 2 review:

	<u>TOY Restriction</u> (no work)	<u>TOY Work Window</u> (work allowed)
Non-tidal waters	Oct. 01 through Jul. 14	Jul. 15 through Sep. 30
Tidal waters	Apr. 10 through Nov. 07	Nov. 08 through Apr. 09

Alternate windows authorized under Category 2 may include species specific windows recommended by the Maine Dept. of Marine Resources and/or Maine Dept. of Inland Fisheries & Wildlife.

**18. Aquatic Life Movements & Management of Water Flows**

a. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity’s primary purpose is to impound water. Unless otherwise stated, activities impounding water in a stream require a PCN to ensure impacts to aquatic life species are avoided and minimized. All permanent and temporary crossings of waterbodies (e.g., streams, wetlands) shall be:

- i. Suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species; and
- ii. Properly aligned and constructed to prevent bank erosion or streambed scour both adjacent to and inside the culvert. Permanent and temporary crossings of wetlands shall be suitably culverted, spanned or bridged in such a manner as to preserve hydraulic and ecological connectivity between the wetlands on either side of the road.

b. To avoid adverse impacts on aquatic organisms, the low flow channel/thalweg shall remain unobstructed during periods of low flow, except when it is necessary to perform the authorized work.

c. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

**19. Water Quality and Coastal Zone Management**

a. Applicants must satisfy any conditions imposed by the state and EPA, where applicable, in their CWA § 401 Water Quality Certifications (WQC) for this GP, or in any Individual § 401 WQC. See Appendix E for state-specific contact information and to determine if any action is required to obtain a 401 WQC. The Corps may require additional water quality management measures to ensure that the authorized activity does not cause or contribute to a violation of water quality standards. All projects authorized by this GP shall be designed, constructed and operated to minimize or eliminate the discharge of pollutants.

b. Applicants must satisfy any additional conditions imposed by the state in their Coastal Zone Management (CZM) Act consistency concurrences for this GP, or in any Individual CZM consistency concurrences. The Corps may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

**20. Floodplains and Floodways**

a. Appropriate measures must be taken to minimize flooding to the maximum extent practicable.

b. Activities within 100-Year Floodplains must comply with applicable Federal Emergency Management Agency (FEMA)-approved state and/or local floodplain management permitting requirements. Proponents may need to coordinate with FEMA and apply for a formal change to the flood insurance study products or forward a set of project plans and relevant technical documentation in a digital format to the Risk

Analysis Branch Chief, Mitigation Division, FEMA, Region 1, 99 High Street, Boston, Massachusetts 02110. Applicants should provide a copy of any documentation to the Corps along with the PCN.

c. Proponents may have to obtain a Flood Hazard Development Permit issued by the town. Inquiries may be directed to the municipality or to the Maine Floodplain Management Coordinator at (207) 287-8063. See <http://www.maine.gov/dacf/flood/>

**21. Storage of Seasonal Structures.** Seasonal or recreational structures such as pier sections, floats, aquaculture structures, etc. that are removed from the waterway for a portion of the year (often referred to as seasonal structures) shall be stored in an upland location landward of mean high water (MHW) or ordinary high water (OHW) and not in wetlands, tidal wetlands, their substrate or on mudflats. These seasonal structures may be stored on the fixed, pile-supported portion of the structure that is waterward of MHW or OHW. Seasonal storage of structures in navigable waters, e.g., in a protected cove on a mooring, requires Corps approval and local harbormaster approval.

## **22. Spawning, Breeding, and Migratory Areas**

a. Jurisdictional activities and impacts such as excavations, discharges of dredged or fill material, and/or suspended sediment producing activities in jurisdictional waters that provide value as fish migratory areas, fish and shellfish spawning or nursery areas, or amphibian and migratory bird breeding areas, during spawning or breeding seasons shall be avoided and minimized to the maximum extent practicable.

b. Jurisdictional activities in waters of the United States that provide value as breeding areas for migratory birds must be avoided to the maximum extent practicable. The permittee is responsible for obtaining any “take” permits required under the USFWS’s regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such “take” permits are required for a particular activity (See Appendix E).

## **23. Vernal Pools**

a. Only vernal pools that meet the current definition of waters of the U.S. are regulated by the Corps.

b. Direct and indirect adverse effects to all vernal pools (VPs), including their envelopes and critical terrestrial habitats (VP Management Areas<sup>13</sup>), shall be avoided and minimized to the maximum extent practicable. Site clearing, grading, and construction activities associated with a regulated activity in the VP Management Area may cause these adverse effects to the VP.

c. The State of Maine has specific protections for vernal pools.<sup>14</sup>

d. When any regulated activities occur within 750 feet of a vernal pool, the following management practices must be followed for all work within any VP Management Area (750’ of a VP’s edge) *in order to qualify for Category I*:

- i. No disturbance within the VP Depression or VP Envelope (area within 100 feet of the VP Depression’s edge)<sup>15</sup>;
- ii. Maintain a minimum of 75% of the Critical Terrestrial Habitat (area within 100-750 feet of the VP Depression’s edge) as unfragmented forest with at least a partly-closed canopy of overstory trees to provide shade, deep litter and woody debris;
- iii. Maintain or restore forest corridors connecting wetlands and significant vernal pools;
- iv. Minimize forest floor disturbance; and
- v. Maintain native understory vegetation and downed woody debris.

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<sup>13</sup> The Corps VP Management Area, which includes the VP and a 750’ radius from the VP’s edge, is defined at Appendix A, Endnote 5.

<sup>14</sup> Appendix G, 10(a)-(d) provides links to the state’s Significant Wildlife Habitat regulations and references that provide impact minimization measures to reference when designing projects.

<sup>15</sup> The no disturbance requirement in the VP envelope [see (b)(i)(1)], and (b)(i)(2), do not apply to temporary impacts associated with construction mats in previously disturbed areas of existing utility project (e.g., transmission lines, gas pipelines) or linear transportation project (e.g., roads, highways, railways, trails, airport runways and taxiways) right-of-ways provided there is a Vegetation Management Plan that avoids, minimizes and mitigates impacts to aquatic resources.

vi. Cape Cod style-curbings or no curbings options shall be used on new roads to facilitate amphibian passage. (Reference Appendix G)

e. A PCN is required for any regulated activity within 750' of a vernal pool when all work within the VP Management Area does not comply with the Category 1 requirements in (d) above. Information on directional buffers in accordance with the VP Directional Buffer Guidance document may be provided in order to demonstrate minimal impact and avoid compensation requirements (Reference Appendix G). Conservation of the un-impacted area within the VP Management Area will often be required.

f. GC 2 requires applicants to delineate or approximately identify on the project plans all waters of the U.S., which contain vernal pools.

g. GC 23(b-d) do not apply to projects that are within a municipality and meet the provisions of a Corps-approved VP Special Area Management Plan (VP SAMP) and are otherwise eligible for self-verification.

#### **24. Invasive and Other Unacceptable Species<sup>16</sup>**

a. The introduction or spread of invasive or other unacceptable plant or animal species on the project site or areas adjacent to the project site caused by the site work shall be avoided to the maximum extent practicable. For example, construction mats and equipment shall be thoroughly cleaned and free of vegetation and soil before and after use. The introduction or spread of invasive plant or animal species on the project site caused by the site work shall be controlled.

b. No cultivars, invasive or other unacceptable plant species may be used for any mitigation, bioengineering, vegetative bank stabilization or any other work authorized by this GP. However, non-native species and cultivars may be used when it is appropriate and specified in a written verification, such as using *Secale cereale* (Annual Rye) to quickly stabilize a site. All PCNs should explain the reason for using non-native species or cultivars.

**25. Programmatic Consultations or Agreements.** The Corps requirements to comply with Section 106 of the NHPA, Section 7 of the Endangered Species Act or Essential Fish Habitat conservation under the Magnuson-Stevens Act may be satisfied by a Programmatic Agreement with the Corps, New England District or another federal action agency. Any Corps, New England District Programmatic Agreements will be available on our website.

**26. Permit On Site.** The permittee shall ensure that a copy of this GP and any accompanying authorization letter with attached plans are at the site of the work authorized by this GP whenever work is being performed and that all construction personnel performing work which may affect waters of the U.S. are aware of its terms and conditions. The entire permit authorization shall be made a part of any and all contracts and subcontracts for work that affects areas of Corps jurisdiction at the site of the work authorized by this GP. This shall be achieved by including the entire permit authorization in the specifications for work. The term "entire permit authorization" means this entire GP and the authorization letter (including its drawings, plans, appendices and other attachments) and also includes permit modifications. If the authorization letter is issued after the construction specifications, but before receipt of bids or quotes, the entire permit authorization shall be included as an addendum to the specifications. If the authorization letter is issued after receipt of bids or quotes, the entire permit authorization shall be included in the contract or subcontract. Although the permittee may assign various aspects of the work to different contractors or subcontractors, all contractors and subcontractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire GP authorization, and no contract or subcontract shall require or allow unauthorized work in areas of Corps jurisdiction.

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<sup>16</sup> For the purposes of this GP, plant species that are considered invasive and unacceptable are provided in Appendix G "Invasive and other Unacceptable Plant Species" of our document "Compensatory Mitigation Guidance" at [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) >> Mitigation. Chapter 4(e) Planting is also particularly relevant. The June 2009 "Corps of Engineers Invasive Species Policy" provides policy, goals and objectives and is located at [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) >> Invasive Species. Additional information can be found at: [www.eddmaps.org/ipane](http://www.eddmaps.org/ipane).

**27. Self-Verification Notification Form (SVNF).** Permittees must complete and submit the SVNF provided at Appendix B to the Corps for work authorized by this GP unless otherwise noted in Appendix A. **NOTE: A copy of a state permit application form may be an acceptable surrogate for the SVNF provided either form used also include plans and an Official Species List of federally listed threatened or endangered species.**

**28. Inspections.** The permittee shall allow the Corps to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of this GP and any written verification. The Corps may also require post-construction engineering drawings for completed work, post-dredging survey drawings for any dredging work, or other post-construction reports. To facilitate these inspections, the permittee shall complete and return to the Corps the following forms:

- For Category 1/Self-Verification: The SVNF (see Appendix B).
- For Category 2/PCN: The a) Work-Start Notification Form and b) Compliance Certification Form, when either is provided with the authorization letter.

**29. Maintenance**

a. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable general conditions and activity-specific conditions to a written verification.

b. The requirement in (a) above does not include maintenance of dredging projects. Each maintenance dredging event exceeding the self-verification limits requires a new PCN unless an unexpired, written PCN or other Corps authorization specifies that the permittee may “dredge and maintain” an area for a particular time period. Self-verification or PCN maintenance dredging includes only those areas and depths previously authorized and actually dredged. Maintenance dredging with ocean or open water disposal will always require a PCN and at least Category 2 review.

c. Some maintenance activities may not be subject to regulation under Section 404 in accordance with 33 CFR 323.4(a)(2). Refer to Appendix A, Endnote 7.

**30. Property Rights.** This GP does not convey any property rights, either in real estate or material, or any exclusive privileges, nor does it authorize any injury to property or invasion of rights or any infringement of federal, state, or local laws or regulations.

**31. Transfer of GP Verifications.** When the structures or work authorized by this GP are still in existence at the time the property is transferred, the terms and conditions of this GP, including any special conditions, will continue to be binding on the entity or individual who received the GP authorizations, as well as the new owner(s) of the property. If the permittee sells the property associated with a GP verification, the permittee may transfer the GP verification to the new owner by submitting a letter to the Corps (see Appendix E for address) to validate the transfer. A copy of the GP verification must be attached to the letter, and *the letter must contain the new owner’s contact information and the following statement and signature:*

“When the structures or work authorized by this GP are still in existence at the time the property is transferred, the terms and conditions of this GP, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this GP and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

\_\_\_\_\_  
(Transferee)

\_\_\_\_\_  
(Date)

**32. Modification, Suspension, and Revocation.** Any work authorized under this GP by self-verification or PCN may be either modified, suspended, or revoked, in whole or in part, pursuant to the policies and procedures of 33 CFR 325.7. Any such action shall not be the basis for any claim for damages against the U.S.

**33. Special Conditions.** The Corps may independently, or at the request of the federal resource agencies, impose other special conditions on a project authorized pursuant to this GP that are determined necessary to minimize adverse navigational and/or environmental effects or based on any other factor of the public interest. Failure to comply with all terms and conditions of the authorization, including special conditions, constitutes a permit violation and may subject the permittee to criminal, civil or administrative penalties and/or an ordered restoration.

**34. False or Incomplete Information.** If the Corps makes a determination regarding the eligibility of a project under this GP and subsequently discovers that it has relied on false, incomplete or inaccurate information provided by the permittee, the Corps may determine that the GP authorization is not valid; modify, suspend or revoke the authorization; and the U.S. Government may institute legal proceedings.

**35. Abandonment.** If the permittee decides to abandon the activity authorized under this GP, unless such abandonment is merely the transfer of property to a third party, he/she may be required to restore the area to the satisfaction of the Corps.

**36. Enforcement cases.** This GP does not apply to any existing or proposed activity in Corps jurisdiction associated with an ongoing Corps or EPA enforcement action, until such time as the enforcement action is resolved or the Corps or EPA, as appropriate, determines that the activity may proceed independently without compromising the enforcement action.

**37. Duration of Authorization.** This GP expires on October 12, 2020. Activities authorized under this GP that have commenced (i.e., are under construction) or are under contract to commence before this GP expires will have until October 12, 2021 to complete the activity under the terms and conditions of the current GP.

**38. Previously Authorized Activities.**

a. Projects that have received authorization (Category 1 or 2) from the Corps and that were completed under the previous PGPs, nationwide permits, regional general permits or letters of permission, shall remain authorized.

b. Activities authorized pursuant to 33 CFR Part 330.3 (“Activities occurring before certain dates”) are not affected by this GP.

c. Any work not commenced nor completed that was authorized in a written letter from the Corps under the GP in effect between October 12, 2010 and October 12, 2015 remains authorized subject to the terms and general conditions of this GP along with any special conditions in the authorizing written letter. Exception – if previously authorized work is not commenced and a new federally listed threatened or endangered species could be affected, the Corps must consult with the Service(s) prior to re-authorizing the work under this GP. Requests for re-authorization must include an updated Official Species list. To request an Official Species List, refer to the instructions in Appendix D.

**39. Discretionary Authority.** Notwithstanding compliance with the terms and conditions of this permit, the Corps retains discretionary authority to require Category 2 or Individual Permit review based on concerns for the aquatic environment or for any other factor of the public interest [33 CFR 320.4(a)]. This authority is invoked on a case-by-case basis whenever the Corps determines that the potential consequences of the proposal warrant a higher level of review based on the concerns stated above. This authority may be invoked for projects that may contribute to cumulative environmental impacts that are more than minimal or if there is a special resource or concern associated with a particular project that is not already covered by the remaining conditions of the GP and that warrants greater review. Whenever the Corps notifies an applicant that an Individual Permit may be required, the project is not authorized under this GP and no work may be conducted until an Individual Permit is obtained or until the Corps notifies the applicant that further review has demonstrated that the work may proceed under this GP.

**40. St. John/St. Croix Rivers.** Work within the Saint John and Saint Croix River basins that requires approval of the International Joint Commission is not eligible for Category 1 and a PCN to the Corps is required if any temporary or permanent use, obstruction or diversion of international boundary waters could affect the natural

flow or levels of waters on the Canadian side of the line; or if any construction or maintenance of remedial works, protective works, dams, or other obstructions in waters downstream from boundary waters could raise the natural level of water on the Canadian side of the boundary.

**41. National Lands.** Activities that impinge upon the value of any National Wildlife Refuge, National Forest, National Marine Sanctuary, National Park or any other area administered by the National Park Service, U.S. Fish and Wildlife Service (USFWS) or U.S. Forest Service are not eligible for Category 1 and require a PCN.

**42. Essential Fish Habitat (EFH).** Any work in the following rivers and streams, including all tributaries to the extent that they are currently or were historically accessible for salmon migration, shall not be authorized under Category 1 of the GP and must be screened for potential impacts to EFH (see Appendix G for more information).

Androscoggin River	Aroostook River	Boyden River	Dennys River
Ducktrap River	East Machias River	Hobart Stream	Kennebec River
Machias River	Narraguagus River	Orland River	Passagassawaukeag River
Patten Stream	Penobscot River	Pleasant River	Presumpscot River
Saco River	Sheepscot River	St. Croix River	Tunk Stream
			Union River

The above does not apply to the following activities which may qualify for Category 1 work:

- Exploratory drilling and borings for bridges.
- Moorings (see Appendix A, Page 28 for Category 1 thresholds and requirements)
- Structures, floats & lifts (see Appendix A, Page 29 for Category 1 thresholds and requirements)
- Other activities specified in a programmatic agreement with NMFS.

**43. Work Site Restoration**

a. Wetland areas where permanent disturbance is not authorized shall be restored to their original condition and elevation, which under no circumstances shall be higher than the pre-construction elevation. Original condition means careful protection and/or removal of existing soil and vegetation, and replacement back to the original location such that the original soil layering and vegetation schemes are approximately the same, unless otherwise authorized.

b. Upon completion of construction, all disturbed wetland areas (the disturbance of these areas must be authorized) shall be properly stabilized. Any seed mix shall contain only plant species native to New England and shall not contain any species listed in the “Invasive and Other Unacceptable Plant Species” Appendix in the “New England District Compensatory Mitigation Guidance” (see GC 24 and refer to Appendix G). This list may be updated periodically.

c. In areas of authorized temporary disturbance, if trees are cut they shall be cut at ground level and not uprooted in order to prevent disruption to the wetland soil structure and to allow stump sprouts to revegetate the work area, unless otherwise authorized.

**44. Bank Stabilization**

a. Projects involving construction or reconstruction/maintenance of bank stabilization structures within Corps jurisdiction shall be designed to minimize environmental effects, effects to neighboring properties, scour, etc. to the maximum extent practicable.

b. Project proponents must design and construct bank stabilization projects using this sequential minimization process: avoidance of aquatic resource impacts, diversion of overland flow, vegetative stabilization, stone-sloped surfaces, and walls/bulkheads. Vertical walls/bulkheads shall only be used in situations where reflected wave energy can be tolerated.

c. Inland Water bank stabilization activities necessary for erosion prevention must meet all of the following criteria: i) No material is placed in excess of the minimum needed for erosion protection; ii) The activity is no more than 500 feet in total length along the bank(s); iii) The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark; iv) Structures angled steeper than 1H:1V and any material other than angular or sub-angular stone or fiber roll revetments require at least a Category 2 review; v) The activity does not involve discharges of dredged or fill

material into special aquatic sites; vi) No material is of the type, or is placed in any location, or in any manner, to impair surface water flow into or out of any water of the U.S.; vii) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas); and viii) The activity is not a stream channelization activity.

d. Bank stabilization activities in tidal waters are provided at Appendix A, Page 30 & 31. Direct impacts in tidal waters from contiguous bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.

#### **45. Stream Work and Crossings & Wetland Crossings**

##### **Notes:**

a. For *Stream Work and Crossings* below, conditions (a) and (b) apply to Inland Waters and Wetlands (see Appendix A, Page 1 for definition) and Navigable Waters (see Appendix A, Page 27 for definition). Conditions (c)-(l) below only apply to Inland Waters and Wetlands that are streams. All new and replacement crossings in Navigable Waters require an application to the Corps and at least a Category 2 review.

b. In-stream work in a watershed occupied by listed Atlantic salmon, Atlantic sturgeon, or shortnose sturgeon [see GC 8(b)] and some stream work such as crossings on EFH waters (see GC 42) is not eligible for Category 1.

c. “High-Quality Stream Segments” are shown at [www.maine.gov/dep/gis/datamaps](http://www.maine.gov/dep/gis/datamaps) and may be useful in evaluating impacts to fisheries. GIS shape files are under “Other Google Earth Interactive Maps” and PDFs by county are under “DEP GIS Maps.” See Appendix E for more state contact information.

##### **Conditions for Stream Work and Crossings:**

a. All permanent crossings of rivers, streams, brooks, etc. (hereon referred to as “streams”) shall be suitably culverted, bridged, or otherwise designed to i) withstand and to prevent the restriction of high flows to qualify for Category 1, and ii) not obstruct the movement of or not substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, beyond the actual duration of construction unless the activity’s primary purpose is to impound water to qualify for Category 1 or 2. (NOTE: Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine applicability of this GP).

b. Any work that temporarily or permanently impacts upstream or downstream flood conditions, or permanently impacts wetlands in excess of Category 1 thresholds, must be reviewed at least under Category 2. See the documents referenced in Appendix G, 8(c) and (d) for guidance.

c. New Stream Crossings. For new stream crossings to qualify for Category 1:

i. Must ensure compliance with GC 45(a) and GC 45(b) above.

ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing

Standards provided on Page 19 and the stream simulation document listed at Appendix G, 8(a).

d. Replacement Stream Crossings. For replacement stream crossings to qualify for Category 1:

i. Must ensure compliance with GC 45(a) and GC 45(b) above.

ii. Shall be designed and constructed in accordance with the Corps General Stream Crossing

Standards provided on Page 19 and the stream simulation document listed at Appendix G, 8(a).

e. Culvert Extensions. Culvert extensions on culverts that do not meet the Corps General Stream Crossing Standards do not qualify for Category 1 and require an application to the Corps and at least Category 2 review.

f. Temporary Stream Crossings.

Note: The General Stream Crossing Standards don’t apply to temporary stream crossings.

i. Temporary stream crossings or cofferdams shall be used for equipment access across streams [see Appendix G, 8(e)]. Note: Areas of fill and/or cofferdams must be included in total waterway/wetlands impacts to determine the review category in Appendix A.

ii. Temporary stream crossings shall be removed within 180 days to qualify for Category 1.

iii. Temporary stream crossings that are not spans<sup>17</sup> (typically culverts) must be designed in accordance with 1-6 below to qualify for Category 1. Category 2 applications should include information demonstrating 2-6 below:

1. Installed and removed during the low flow period specified in GC 45(l) below.
2. Placed on geotextile fabric or other material where practicable to ensure restoration to the original grade. Soil may not be used to construct or stabilize these structures and rock must be large enough to allow for easy removal without disrupting the streambed.
3. Designed and maintained to withstand and pass high flows. Water height should be no higher than the top of the culvert's inlet. A minimum culvert diameter of two feet is required to pass debris. Culverts must be aligned to prevent bank erosion or streambed scour.
4. Equipped with energy dissipating devices installed downstream if necessary to prevent scour.
5. Designed and maintained to prevent soil from entering the waterbody.
6. Removed upon the completion of work. Impacts to the streambed or banks requires restoration to their original condition using stream simulation methods<sup>18</sup>.

g. Slip Lining. Work using slip lining (retrofitting an existing culvert by inserting a smaller diameter pipe), invert lining, or resulting in decreased diameter, does not qualify for Category 1, either as new work or maintenance activities.

h. Work in Flowing Waters. To qualify for Category 1, no unconfined fill [see GC 14(b)] or excavation in flowing waters is allowed. To accomplish this:

i. Bank stabilization work below ordinary high water (OHW) shall utilize erosion controls such as inflatable cofferdams, jersey barrier, silt screen, turbidity curtain, etc. where practicable to prevent sediment input to the stream and to minimize turbidity and sedimentation impacts for sensitive life stages. Bank stabilization above OHW must utilize erosion controls.

ii. Management techniques such as temporary flume pipes, culverts, cofferdams, etc. must be used to maintain normal flows within the stream boundary's confines, or water diversions may be used immediately up and downstream of the work footprint (see Appendix A, Endnote 6) or work must be performed in the dry under no flow conditions, or under very low flow conditions following the practices in GC 45(a).

i. Minimization. In order to make the Category 2 review process more efficient and result in a faster decision, new and replacement stream crossings should be designed using the least intrusive and environmentally damaging method following this sequential minimization process: 1) spans with no stream impacts, 2) spans with stream impacts, and 3) embedded culverts with stream simulation or low-slope design.

j. Maintenance Requirements. The permittee shall maintain the work authorized herein in good condition and in conformance with the terms and general conditions of this permit to facilitate aquatic life passage as stated in GC 45(a). Culverts that develop "hanging" inlets or outlets, result in bed washout, or a stream that doesn't match the characteristics of the substrate in the natural stream channel such as mobility, slope, stability confinement will require maintenance or repair to comply with this GC. This does not apply to GC 45(f) above.

k. Maintenance and Replacement Information. An existing stream crossing must be authorized and in compliance with all conditions of its authorization(s) to qualify for maintenance not subject to regulation. See Appendix A, Endnote 7. A non-serviceable crossing is not eligible for maintenance and is therefore considered as a replacement crossing [see GC 45(d)].

l. Work Window. For projects that otherwise meet the terms of Category 1, in-stream construction work shall be conducted during the low flow period July 15 – September 30 in any year. Projects that are not to be conducted during that time period are ineligible for Category 1 and shall be screened pursuant to Category 2, regardless of the waterway and wetland fill and/or impact area.

**Corps General Stream Crossing Standards (required for Category 1; recommended for Category 2):**

- a. Culverts must be embedded:

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<sup>17</sup> For the purposes of this GP, spans are bridges, three-sided box culverts, open-bottom culverts or arches that span the stream with footings landward of bankfull width.

<sup>18</sup> Design and construction shall be in accordance with the stream simulation document listed at Appendix G, 8(a).

- $\geq 2$  feet for box culverts and other culverts with smooth internal walls,
- $\geq 1$  foot for corrugated pipe arches
- $\geq 1$  foot and at least 25 percent for corrugated round pipe culverts

b. **For new crossings**, spans<sup>17</sup> are required to avoid or cause minimal disruption to the streambed and to meet the requirements of General Condition 45(a) and 45(b). Footings and abutments must be landward of 1.2 times bankfull width. To the greatest extent practicable, work in the stream shall be minimized, and design and construction shall allow the streambed's natural structure and integrity to remain intact. Any fill or excavation of the streambed below bankfull width other than footings, support pilings, or work specified in 45(h)ii requires Category 2 review and, unless demonstrated otherwise, stream simulation<sup>18</sup> to establish substrate and banks in the span structure and work area as specified in (d) and (e) below.

c. **For replacement crossings**, spans<sup>17</sup> are required to meet the requirements of General Condition 45(a) and 45(b). Footings and abutments shall be landward of 1.2 times bankfull width. Unless demonstrated otherwise, stream simulation<sup>18</sup> is required to establish substrate and banks in the span structure and work area as specified in (d) and (e) below.

d. Crossings must have a natural bottom substrate within the structure matching the characteristics of the substrate in the natural stream channel and the banks (mobility, slope, stability, confinement, grain and rock size) at the time of construction and over time as the structure has had the opportunity to pass significant flood events. To allow terrestrial passage for wildlife and prevent undermining the footings, crossings shall have a bank on both sides of the stream matching the horizontal profile of the existing stream and banks<sup>18</sup>. Note: Installation of substrate material within smaller culverts may not be safe or practicable. In these cases, it may be necessary to allow for natural deposition and bed development unless alternative methods are identified.

e. Crossings must be designed and constructed<sup>18</sup> with appropriate bed forms and streambed characteristics so that water depths and velocities are comparable to those found in the natural channel at a variety of flows. In order to provide appropriate water depths and velocities at a variety of flows and especially low flows, it is usually necessary to reconstruct the streambed or preserve the natural channel within the structure. Otherwise, the width of the structure needed to accommodate higher flows will create conditions that are too shallow at low flows. The grain and rock size, and arrangement of streambed materials within the structure should be in accordance with (d) above. Flows could go subsurface within the structure if only large material is used without smaller material filling the voids.

#### **Conditions for Wetland Crossings:**

a. All temporary and permanent crossings of wetlands shall be suitably culverted, bridged, or otherwise designed to: i) Withstand and prevent the restriction of high flows, ii) Not obstruct the movement of or not substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the wetland, including those species that normally migrate through the area, beyond the actual duration of construction unless the activity's primary purpose is to impound water. See Appendix E for the Maine DEP's crossing standards.

b. To qualify for Category 1, new and replacement wetland crossings that are permanent shall be culverted, spanned or bridged in such a manner as to preserve hydraulic and ecological connectivity, at its present level, between the wetlands on either side of the road. To meet this requirement, we recommend that culverts, spans or bridges be placed at least every 50 feet with an opening at least 2 feet high and 3 feet wide at ground level where practicable. Closed bottom culverts shall be embedded at least 6 inches with a natural bottom.

c. In the case of non-compliance, the permittee shall take necessary measures to correct wetland damage due to lack of hydraulic and ecological connectivity.

d. Any work that results in flooding, results in impacts to wetlands on either side of the wetland crossing in excess of Category 1 thresholds, or impacts wetland drainage from the upgradient side of the wetland crossing does not qualify for Category 1.



Robert J. Desista  
Deputy Chief, Regulatory Division  
For DISTRICT ENGINEER

DATE

10/13/15

## APPENDIX A: DEFINITION OF CATEGORIES

<p><b>A. INLAND WATERS AND WETLANDS</b></p>	<p><b>Inland Waters and Wetlands:</b> Waters that are regulated under Section 404 of the Clean Water Act, including rivers, streams, lakes, ponds and wetlands, and <i>excluding Section 10 Navigable Waters of the U.S. (tidal and freshwater)</i>. The jurisdictional limits are the ordinary high water (OHW) mark in the absence of adjacent wetlands, beyond the OHW mark to the limit of adjacent wetlands when adjacent wetlands are present, and the wetland limit when only wetlands are present. For the purposes of this GP and designated activities, fill placed in the area between the mean high water (MHW) and the high tide line (HTL), and in the bordering and contiguous wetlands<sup>1</sup> to tidal waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 27 below.)</p> <p>Projects not meeting Category 1 require an application for review as a Category 2 or Individual Permit project.</p> <p>All Category 1 and 2 projects must comply with all of this GP's applicable terms (Pages 1 – 4) and General Conditions (Pages 5–20).</p>	
<p><b>ACTIVITY</b></p>	<p><b>CATEGORY 1 Self-Verification Eligible (SVNF Required)</b></p>	
<p><b>1. Repair, Replacement, and Expansion, and Maintenance of Authorized Structures and Fills</b></p>	<p>Repair or maintenance of existing, currently serviceable, authorized fills with no expansion or change in use:</p> <ul style="list-style-type: none"> <li>• Conditions of the original authorization apply.</li> <li>• Minor deviations in fill design allowed.<sup>7</sup></li> <li>• The repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events is authorized, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage.</li> <li>• No effect on federally listed endangered or threatened species or critical habitat.</li> </ul>	<p><b>CATEGORY 2 (PCN Required)</b></p> <p>Replacement of non-serviceable fills, or repair/maintenance of serviceable fill, with expansion &lt;3 acres, or with a change in use.</p>
<p><b>2. Moorings</b></p>	<p>NA – moorings in non-navigable inland waters are not subject to Corps jurisdiction.</p> <p>Note: Moorings placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on Page 28 below.)</p>	<p>NA</p>
<p><b>3. Structures, Floats &amp; Lifts</b></p>	<p>For solid fill or crib supported structures on inland waters, &lt;15,000 square feet (SF) of waterway and/or wetland fill, associated secondary impacts<sup>2</sup>, and temporary fills.</p> <ul style="list-style-type: none"> <li>• No effect on federally listed endangered or threatened species or critical habitat.</li> <li>• Note: Temporary or permanent structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 29 below.)</li> </ul>	<p>1. Work not eligible for Category 1</p> <p>2. ≥15,000 SF to &lt;3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated).</p>
<p><b>4. Aids to Navigation and Temporary Recreational Structures</b></p>	<p>NA - this activity in non-navigable inland waters is not subject to Corps jurisdiction.</p> <p>Note: Aids to Navigation and other structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 30 below.)</p>	<p>NA</p>

<p><b>5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation</b></p>	<p>1. For regulated discharges associated with excavation, and disposal &lt;15,000 SF inland waterway and/or wetland impacts.</p> <p>2. The activity does not occur in navigable waters of the U.S.</p> <p>3. Stream channelization, relocation or loss of streambed including impoundments or discharge of tailings into streams does not occur.</p> <p>4. No effect on federally listed endangered or threatened species or critical habitat.</p>	<p>1. Work not eligible for Category 1</p> <p>2. ≥15,000 SF to &lt;3 acres of inland waters.</p>
<p><b>6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges</b></p>	<p>NA - For discharges incidental to the construction of bridges in inland waters of the U.S. refer to Activity 23 (Stream and Wetland Crossings) and GC 45.</p> <p>Note: Discharges of Dredged or Fill Material Incidental to the Construction of Bridges in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters on page 30 below.)</p>	<p>NA</p>
<p><b>7. Bank and Shoreline Stabilization</b></p>	<p>Inland bank stabilization &lt;500 FT long and ≤1 CY of fill per linear foot below OHW, provided:</p> <ul style="list-style-type: none"> <li>• ≤1 cubic yard of fill per linear foot placed along the bank waterward of ordinary high water.</li> <li>• Work complies with the GCs (GC 44 in particular), including: <ul style="list-style-type: none"> <li>○ No structures angled steeper than 1H:1V allowed. Only rough-faced stone or fiber roll revetments allowed.</li> <li>○ No in-stream work involving fill or excavation in flowing waters (see GC 45(h)).</li> </ul> </li> <li>• In-water work limited to Jul 15 – Sep 30.</li> <li>• No work in vernal pools<sup>5</sup> or SAS<sup>3</sup>.</li> <li>• No effect on federally listed endangered or threatened species or critical habitat.</li> </ul>	<p>Work not eligible for Category 1</p>
<p><b>8. Residential, Commercial, Industrial, and Institutional Developments, and Recreational Facilities</b></p>	<p>1. &lt;15,000 SF of inland waterway and/or wetland fill and associated secondary impacts<sup>2</sup> (e.g., areas drained, flooded, fragmented, mechanically cleared or excavated). Fill area includes all temporary and permanent fill, and regulated discharges associated with excavation. Construction mats are considered as fill. [See GC 14]</p> <p><u>Provided:</u></p> <ul style="list-style-type: none"> <li>• Historic fill + proposed impact area &lt;15,000 SF complies with GC 5, Single and Complete Projects.</li> <li>• No work in special aquatic sites (SAS)<sup>4</sup> other than wetlands.</li> <li>• No effect on federally listed endangered or threatened species or critical habitat.</li> </ul> <p>2. For work in Vernal Pool (VP) Management Areas (includes VPs)<sup>5</sup>:</p>	<p>1. Work not eligible for Category 1.</p> <p>2. ≥15,000 SF to &lt;3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). Fill area includes all temporary and permanent fill (including mats), and regulated discharges associated with excavation.</p> <p>3. <i>Mechanical clearing without grubbing or other soil disturbance &gt; 3 acres as a secondary impact may still be eligible for Category 2 at the discretion of the Corps.</i></p> <p>See GC 2 and Appendix C for wetland delineation</p>

	<ul style="list-style-type: none"> <li>• See GC 23 and Appendix C for VP delineation requirements.</li> <li>• See GC 23 to determine if work qualifies for Category 1 or 2.</li> <li>• See Appendix G for VP documents providing mitigation guidance.</li> </ul>	requirements.
<p><b>9. Utility Line Activities</b></p>	<ol style="list-style-type: none"> <li>1. &lt;15,000 SF of inland waterway and/or wetland fill, associated secondary impacts<sup>2</sup>, and temporary fills.</li> <li>2. The activity does not occur in, over, or under navigable waters of the U.S.</li> <li>3. Intake structures that are dry hydrants used exclusively for firefighting activities with no stream impoundments.</li> <li>4. There is no permanent change in pre-construction contours in waters of the U.S.</li> <li>5. Material resulting from trench excavation is temporarily side cast into waters of the U.S. for ≤3 months and is placed in such a manner that it is not dispersed by currents or other forces.</li> <li>6. The utility line is placed within and does not run a) parallel to, or b) along a streambed.</li> <li>7. Stream channelization, relocation or loss of streambed including impoundments does not occur.</li> <li>8. No effect on federally listed endangered or threatened species or critical habitat.</li> <li>9. There is no discharge in SAS other than non-tidal wetlands.</li> <li>10. Construction mats<sup>4</sup> of any area necessary to conduct activities that were previously authorized, authorized under Category 1, or not subject to regulation (see Endnote 7). Authorized construction mats must be in place for &lt;3 months, removed immediately upon work completion, and the wetlands must be restored (see GC 43).</li> <li>11. Stream crossings must comply with GC 17.</li> </ol>	<ol style="list-style-type: none"> <li>1. Work not eligible for Category 1</li> <li>2. ≥15,000 SF to &lt;3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). Fill area includes all temporary and permanent fill (including mats), and regulated discharges associated with excavation.</li> <li>3. <i>Mechanical clearing without grubbing or other soil disturbance &gt;3 acres as a secondary impact may still be eligible for Category 2 at the discretion of the Corps.</i></li> </ol>
<p><b>10. Linear Transportation Projects (not including stream crossings)</b></p> <p><b>For stream crossings, refer to Activity 23</b></p>	<ol style="list-style-type: none"> <li>1. &lt;15,000 SF of inland waterway and/or wetland fill associated secondary impacts (e.g., areas drained, flooded, fragmented, mechanically cleared or excavated). Fill area includes all temporary and permanent fill, and regulated discharges associated with excavation. Construction mats are considered fill. (See GC 14.) Provided: <ul style="list-style-type: none"> <li>• Historic fill + proposed impact area &lt;15,000 SF and complies with GC 5 single and complete projects.</li> <li>• No work in special aquatic sites (SAS) other than wetlands.</li> </ul> </li> <li>2. Construction mats<sup>4</sup> of any area necessary to conduct activities that were previously authorized, authorized under Category 1, or not subject to regulation (see Endnote 7). Authorized construction mats must be in place for &lt;3 months, removed immediately upon work completion, and the wetlands must be restored (see GC 43).</li> <li>3. No effect on federally listed endangered or threatened species or critical habitat.</li> </ol>	<ol style="list-style-type: none"> <li>1. ≥15,000 SF to &lt;3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). Fill area includes all temporary and permanent fill (including mats), and regulated discharges associated with excavation.</li> <li>2. <i>Mechanical clearing without grubbing or other soil disturbance &gt;3 acres as a secondary impact may still be eligible for Category 2 at the discretion of the Corps.</i></li> </ol>

<p><b>11. Mining Activities</b></p>	<p>1. &lt;15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts.  2. The activity does not occur in navigable waters of the U.S.  3. Stream channelization, relocation or loss of streambed including impoundments or discharge of tailings into streams does not occur.  4. No effect on federally listed endangered or threatened species or critical habitat.</p>	<p>1. Work not eligible for Category 1.  2. ≥15,000 SF to &lt;3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). Fill area includes all temporary and permanent fill (including mats), and regulated discharges associated with excavation.</p>
<p><b>12. Boat Ramps</b></p>	<p>1. &lt;15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts.  2. No effect on federally listed endangered or threatened species or critical habitat.</p>	<p>1. Work not eligible for Category 1  2. &gt;15,000 SF and &lt; 3 acres of impact.</p>
<p><b>13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects</b></p>	<p><i>For land-based facilities:</i>  1. &lt;15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts.  2. Stream channelization, relocation or loss of streambed including impoundments does not occur.  3. No effect on federally listed endangered or threatened species or critical habitat.   <i>For water-based facilities and hydropower projects:</i>  No new facilities are eligible.  Not Applicable</p>	<p><i>For land-based activities:</i>  1. Work not eligible for Category 1.  2. &gt;15,000 SF and &lt; 3 acres impact.  3. <i>Mechanical clearing without grubbing or other soil disturbance &gt;3 acres as a secondary impact may still be eligible for Category 2 at the discretion of the Corps.</i>   <i>For water-based facilities and hydropower projects:</i>  &gt; 3 acres of impact will require an IP.</p>
<p><b>14. Reshaping Existing Drainage Ditches &amp; Mosquito Management</b></p>	<p>Not Applicable</p>	<p>Not Applicable</p>
<p><b>15. Oil Spill and Hazardous Material Cleanup</b></p>	<p>Jurisdictional activities required for the containment and cleanup of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 or any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS<sup>3</sup> must typically be restored in place at the same elevation.  <i>Note: SVN<sup>F</sup> or a surrogate state reporting form may be submitted after the fact.</i></p>	<p>Work not eligible for Category 1</p>

<p><b>16. Cleanup of Hazardous and toxic waste</b></p>	<p>Specific jurisdictional activities to effect the containment, stabilization, or removal of hazardous or toxic waste materials, including court ordered remedial action plans or related settlements, which are performed, ordered or sponsored by a government agency with established legal or regulatory authority. SAS should be restored in place at the same elevation.</p> <ul style="list-style-type: none"> <li>• &lt;15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts.</li> <li>• No stream channelization, relocation or loss of streambed occurs.</li> <li>• The project does not involve establishing new disposal sites or expanding existing sites used for the disposal of hazardous or toxic waste.</li> <li>• No effect on federally listed endangered or threatened species or critical habitat.</li> </ul>	<p>Work not eligible for Category 1</p>
<p><b>17. Scientific Measurements Devices</b></p>	<ol style="list-style-type: none"> <li>1. Scientific measurement devices whose purpose is to measure and record scientific data, such as staff gages, water recording devices, water quality testing and improvement devices, and similar structures. This excludes any biological sampling devices. Structures may not restrict or concentrate movement of aquatic organisms.</li> <li>2. No effect on federally listed endangered or threatened species or critical habitat.</li> </ol>	<p>Work not eligible for Category 1</p>
<p><b>18. Survey Activities</b></p>	<ol style="list-style-type: none"> <li>1. Jurisdictional survey activities, such as core sampling, seismic exploratory operations, plugging of seismic shot holes and other exploratory-type bore holes, exploratory trenching, soil surveys, sampling, and historic resources surveys (but not recovery). Exploratory trenches must be restored in accordance with GC 43. The construction of temporary pads is authorized provided the discharge doesn't exceed 25 CY. This doesn't authorize permanent structures or the drilling and the discharge of excavated material from test wells for oil and gas exploration (the plugging of such wells is authorized).</li> <li>2. No effect on federally listed endangered or threatened species or critical habitat.</li> </ol>	<p>Work not eligible for Category 1</p>
<p><b>19. Agricultural Activities</b></p>	<ol style="list-style-type: none"> <li>1. For those activities subject to Corps jurisdiction<sup>16</sup>, &lt;15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts.</li> <li>2. No stream channelization, relocation, loss of streambed, or farm ponds in streams.</li> <li>3. No effect on federally listed endangered or threatened species or critical habitat.</li> </ol>	<ol style="list-style-type: none"> <li>1. ≥15,000 SF to &lt;3 acres of inland waterway and/or wetland fill and associated secondary impacts (e.g., areas drained, flooded, fragmented, or excavated). Fill area includes all temporary and permanent fill (including mats), and regulated discharges associated with excavation.</li> <li>2. &gt; 3 acres of impact will require an IP.</li> </ol>

<p><b>20. Fish and Wildlife Harvesting, Enhancement and Attraction Devices and Activities</b></p>	<p>NA - this activity in non-navigable inland waters, if not involving a discharge of dredged or fill material, is not subject to Corps jurisdiction. Note: Related structures placed in freshwater navigable waters (e.g. the upper Penobscot or Kennebec Rivers) are reviewed in the Navigable Waters section. (See B. Navigable Waters on Page 33 below.)</p>	<p>Not Applicable</p>
<p><b>21. Habitat Restoration, Establishment and Enhancement Activities</b></p>	<p>1. &lt;15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts.  2. The activity is supported in writing by a local, state, or non-Corps Federal environmental agency. Water impoundments require PCN.  3. No conversion of i) a stream to wetland or vice versa, wetland to a pond or uplands, and ii) one wetland type to another.  4. No dam removal.  5. No effect on federally listed endangered or threatened species or critical habitat.</p>	<p>1. Work not eligible for Category 1  2. Aquatic habitat restoration, establishment, and enhancement of wetlands and riparian areas and the restoration and enhancement of streams and other open waters with impacts of any area <math>\geq</math> 15,000 SF, provided those activities result in net increase in overall aquatic resource functions and services.<sup>8</sup></p>
<p><b>22. Previously Authorized Activities</b></p>	<p>Any work not commenced nor completed that was authorized in a written letter from the Corps under the GP in effect between October 12, 2010 and October 12, 2015. The terms and general conditions of this GP apply along with any special conditions in the written authorization.</p>	
<p><b>23. Stream &amp; Wetland Crossings</b></p>	<p>1. River, stream and brook work and crossings:  <ul style="list-style-type: none"> <li>• Must comply with GC 45 in particular, including: <ul style="list-style-type: none"> <li>o No slip lining [see GC 45 (g)].</li> <li>o No in-stream work involving fill or excavation in flowing waters [see GC 45(h)].</li> <li>o In-stream work limited to Jul 15 – Sep 30 [see GC 45 (l)].</li> <li>• No work in riffles and pools<sup>3</sup>.</li> <li>• No stream relocations.</li> <li>• No dams or dikes<sup>6</sup>.</li> <li>• No effect on federally listed endangered or threatened species or critical habitat.</li> <li>• &lt;15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts.</li> </ul> </li> </ul> 2. Wetland crossings must comply with the particularly relevant GC 45.</p>	<p>Work not eligible for Category 1</p>
<p><b>24. Aquaculture (freshwater)</b></p>	<p>For land based installations, &lt;15,000 SF of inland waterway and/or wetland fill, associated secondary impacts, and temporary impacts.  <ul style="list-style-type: none"> <li>• In-stream/in-water work limited to Jul 15 – Sep 30.</li> <li>• No effect on federally listed endangered or threatened species or critical habitat.</li> </ul> Note: Related structures placed in freshwater navigable waters are reviewed in the Navigable Waters section. (See B. Navigable Waters, below.)</p>	<p>Work not eligible for Category 1</p>

<p><b>B. NAVIGABLE WATERS</b></p>	<p><b>Navigable Waters of the United States:</b> Waters that are subject to the ebb and flow of the tide and/or the tidal and non-tidal portions of the Federally designated navigable waters (the Penobscot River, Kennebec River, and Lake Umbagog) (Section 10 Rivers and Harbors Act of 1899). The jurisdictional limits are the mean high water (MHW) line in tidal waters and the ordinary high water (OHW) mark in non-tidal portions of the federally designated navigable rivers. For the purposes of this GP, fill placed in the area between the mean high water (MHW) and the high tide line (HTL), and in the bordering and contiguous wetlands<sup>1</sup> to tidal waters are also reviewed in this Navigable Waters section.</p> <p>Projects not meeting Category 1 require an application for review as a Category 2 or Individual Permit project. All Category 1 and 2 projects must comply with all of this GP's applicable terms (Pages 1 - 4) and General Conditions (Pages 5 - 20).</p>	
<p><b>ACTIVITY</b></p>	<p><b>CATEGORY 1 Self-Verification Eligible (SVNF Required)</b></p>	<p><b>CATEGORY 2 (PCN Required)</b></p>
<p><b>1. Repair, Replacement, and Expansion of Maintenance of Authorized (or Grandfathered) Structures and Fills</b></p>	<p>1. Repair, replacement in-kind, or maintenance<sup>7</sup> of existing, currently serviceable<sup>7</sup>, authorized structures or fills:</p> <ul style="list-style-type: none"> <li>• All work is to be conducted in-the-dry, during low water.</li> <li>• Conditions of the original authorization apply.</li> <li>• No substantial expansion or change in use.</li> <li>• No new fill in SAS<sup>3</sup>.</li> <li>• Must be rebuilt in same footprint, however minor deviations in structure design allowed<sup>7</sup>.</li> <li>• The repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events is authorized, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage.</li> </ul>	<p>1. Replacement of non-serviceable structures and fills or repair/maintenance of serviceable structures or fills, with fill, replacement or expansion &lt;1 acre, or with a change in use.</p> <p>2. &lt;1 acre temporary or permanent fill, excavation and/or secondary impacts. Fill area includes all temporary and permanent waterway fills, provided:</p> <ul style="list-style-type: none"> <li>• Temporary or permanent fill in eelgrass<sup>14</sup> &lt;1000 SF.</li> <li>• Permanent fill in SAS (excluding eelgrass<sup>14</sup>) &lt;4300 SF.</li> </ul> <p>3. Standard Pile Driving Conditions. Work involving piles shall adhere to one of the four methods below:</p> <ul style="list-style-type: none"> <li>• Piles installed in-the-dry during low water or in-water between Nov. 8<sup>th</sup> - Apr. 9<sup>th</sup>, or</li> <li>• Must be drilled and pinned to ledge, or</li> <li>• Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or</li> <li>• Impact hammers limited to one hammer and &lt;50 piles installed/day with the following: wood piles of any size, concrete piles ≤18-inches diameter, steel piles &lt;12-inches diameter if the hammer is ≤3000 lbs and a wood cushion is used between the hammer and steel pile, and</li> <li>• For the methods above: <ul style="list-style-type: none"> <li>○ In-water noise levels shall not exceed &gt;187dB cSEL re 1μPa or 206dB peak re 1μPa at a distance &gt;10m from the pile being installed, and</li> <li>○ In-water noise levels &gt;150dB peak re 1μPa shall not exceed 12 consecutive hours on any given day and a 12 hour recovery period (i.e., in-water noise below 150dB peak re 1μPa) must be provided between work days.</li> </ul> </li> <li>• Existing derelict, degraded or abandoned piles in the project area that are affected by project activities should be removed and properly disposed of in an upland location landward of MHW or OHW and not in wetlands, tidal wetlands, their substrate or mudflats.</li> </ul>

<p><b>2. Moorings</b></p>	<p>1. Private, non-commercial, non-rental, single-boat moorings, provided:</p> <ul style="list-style-type: none"> <li>• Authorized by the local harbormaster/town.</li> <li>• Not associated with any boating facility.<sup>11</sup></li> <li>• Boat or mooring not located in a Federal Navigation Project or buffer zone<sup>12</sup> other than in a Federal Anchorage<sup>12</sup>. Moorings in a Federal Anchorage not associated with a boating facility<sup>11</sup> and are not for rent.</li> <li>• No interference with navigation.</li> <li>• No new moorings located in SAS<sup>3</sup>. Prior to installation of moorings, a site-specific eelgrass survey should be conducted to document that eelgrass is not present.</li> <li>• When existing, authorized moorings in SAS<sup>3</sup> are going to be replaced, they should be replaced with low impact mooring technology that prevents mooring chains from resting or dragging on the bottom substrate at all tides and helical anchors, or equivalent SAS protection systems where practicable.</li> </ul> <p>2. Minor relocation of previously authorized moorings, provided:</p> <ul style="list-style-type: none"> <li>• Authorized by the local harbormaster/town.</li> <li>• Not located in SAS<sup>3</sup></li> <li>• No interference with navigation.</li> <li>• Cannot be relocated into a Federal Navigation Project<sup>12</sup> other than a Federal Anchorage<sup>12</sup></li> </ul> <p><b>Note: <i>Cat 1 eligible moorings do not require SVNf.</i></b></p>	<p>1. Moorings associated with an existing boating facility<sup>11</sup>. An eelgrass<sup>14</sup> survey may be required.</p> <p>2. Moorings that don't meet the terms in Category 1 and don't require an Individual Permit. This includes private moorings with no harbormaster or means of local approval.</p> <p>3. Moorings located such that they, and/or vessels docked or moored at them, are within the buffer zone of the horizontal limits<sup>13</sup> of a Federal Channel<sup>12</sup>. (See Appendix H.) The buffer zone is equal to 3 times the authorized depth of that channel.</p> <p>4. An IP is required for moorings within the horizontal limits<sup>11</sup>, or with moored vessels that extend, into the horizontal limits of a Federal Navigation Project<sup>12</sup>, except those in Federal Anchorages<sup>12</sup>.</p> <p><i>For 1-4 above, siting of new individual moorings in SAS<sup>3</sup>, including eelgrass<sup>14</sup>, should be avoided to the maximum extent practicable. If SAS<sup>3</sup> cannot be avoided, plans should show elastic mooring systems that prevent mooring chains from resting or dragging on the bottom substrate at all tides and helical anchors, or equivalent SAS protection systems, where practicable. For moorings that appear to impact SAS, the Corps may require an eelgrass survey.</i></p>
<p><b>3. Structures, Floats and Lifts</b></p>	<p>1. Reconfiguration of existing authorized structures shall occur in-the-dry during low water.</p> <p>2. Minor relocation of previously authorized floats or moored floats/lobster cars, provided:</p> <ul style="list-style-type: none"> <li>• Authorized by the local harbormaster/town.</li> <li>• Not located in SAS<sup>3</sup>.</li> <li>• No interference with navigation.</li> <li>• Cannot be relocated into a Federal Navigation Project<sup>12</sup> other than a Federal Anchorage<sup>12</sup>.</li> </ul>	<p>1. New structures or floats, including floatways/skidways, built to access waterway (seasonal and permanent). Includes both pile supported and crib supported structures.</p> <p>2. Expansions to existing boating facilities<sup>11</sup></p> <ul style="list-style-type: none"> <li>• <i>Pile-supported structures &lt;400 SF, with attached floats totaling ≤200 SF.</i></li> <li>• <i>Structures are ≤4' wide and have at least a 1:1 height:width ratio<sup>11</sup>.</i></li> <li>• <i>Floats supported a minimum of 18" above the substrate during all tides.</i></li> <li>• <i>Structures &amp; floats not located within 25' of any eelgrass<sup>8</sup>.</i></li> <li>• <i>Moored vessels not positioned over SAS<sup>3</sup>.</i></li> </ul>

- *The Corps may require a letter of no objection from the abutter if structure is to be within 25 feet of the property line.*
  - *No structure extends across >25% of the waterway width at mean low water.*
  - *Not located within the buffer zone of the horizontal limits<sup>13</sup> of a Corps Federal Navigation Project (FNP) (Appendix F). The buffer zone is equal to three times the authorized depth of that FNP.*
3. An Individual Permit is required for structures or floats, including floatways/skidways, located such that they and/or vessels docked or moored at them are within the horizontal limits<sup>13</sup> of a Corps Federal Navigation Project<sup>12</sup> (see Appendix H).
  4. An Individual Permit is required for structures & floats associated with a new or previously unauthorized boating facility<sup>11</sup>.
  5. Standard Pile Driving Conditions. Work involving piles shall adhere to one of the four methods below:
    - Piles installed in-the-dry during low water or in-water between Nov. 8<sup>th</sup> - Apr. 9<sup>th</sup>, or
    - Must be drilled and pinned to ledge, or
    - Vibratory hammers used to install any size and quantity of wood, concrete or steel piles, or
    - Impact hammers limited to one hammer and <50 piles installed/day with the following: wood piles of any size, concrete piles ≤18-inches diameter, steel piles <12-inches diameter if the hammer is ≤3000 lbs and a wood cushion is used between the hammer and steel pile, and
    - For the methods above:
      - In-water noise levels shall not exceed >187dB cSEL re 1μPa or 206dB peak re 1μPa at a distance >10m from the pile being installed, and
      - In-water noise levels >150dB peak re 1μPa shall not exceed 12 consecutive hours on any given day and a 12 hour recovery period (i.e., in-water noise below 150dB peak re 1μPa) must be provided between work days.
    - Existing derelict, degraded or abandoned piles in the project area that are affected by project activities should be removed and properly disposed of in an upland location landward of MHW or OHW and not in wetlands, tidal wetlands, their substrate or mudflats.

<p><b>4. Aids to Navigation and Temporary Recreational Structures</b></p>	<p>1. Temporary buoys, markers, floats, etc. for recreational use during specific events, provided they are removed within 30 days after use is discontinued.</p> <p>2. The placement of aids to navigation and regulatory markers which are approved by and installed in accordance with the requirements of the U.S. Coast Guard. (See 33 CFR 66, Chapter I, subchapter C).”</p> <p><i>Note: Cat 1 eligible aids to navigation and regulatory markers do not require SVNF.</i></p>	<p>Work not eligible for Category 1</p>
<p><b>5. Dredging, Disposal of Dredged Material, Beach Nourishment, and Rock Removal and Relocation</b></p>	<p>1. Maintenance dredging<sup>10</sup> for navigational purposes &lt;1,000 CY with upland disposal. Includes return water from upland contained disposal area, provided:</p> <ul style="list-style-type: none"> <li>• Proper siltation controls are used.</li> <li>• Dredging &amp; disposal operation limited to Nov. 8 – Apr. 9.</li> <li>• No impact to SAS<sup>3</sup>.</li> <li>• No dredging in intertidal areas.</li> <li>• No dredging within 100’ of shellfish beds.</li> <li>• No dredging in areas designated as Critical Habitat for Atlantic salmon [see GC 8(b) &amp; (c)].</li> <li>• For dredging in tidal waters outside of Atlantic salmon critical habitat, applicants must contact NMFS (see GC 8) to ensure no impacts to listed species such as shortnose sturgeon, Atlantic sururgeon, and listed sturgeon critical habitat.</li> <li>• Project proponents must contact the USFWS for work on coastal beaches to ensure no impacts to piping plovers, roseate terns, rufa red knot, or their habitat [see GC 8(c)].</li> <li>• No underwater blasting.</li> </ul> <p>2. Maintenance dredging is not eligible for Category 1 if conducted in tidal portions of the Penobscot river upstream of a line extending from Turner Point in Castine to Moose Point (formerly Squaw Point) on Cape Jellison in Stockton Springs or in tidal portions of the Kennebec or Androscoggin Rivers upstream of a line extending from Doubling Point in Arrowsic to Hospital Point in West Bath.</p>	<p>1. Maintenance dredging<sup>10</sup> ≥1,000 CY, new dredging &lt;25,000 CY, or projects not meeting Category 1. Includes return water from upland contained disposal areas. Disposal includes:</p> <ul style="list-style-type: none"> <li>• Upland.</li> <li>• Beach nourishment (above mean high water) of any area provided the dredging’s primary purpose is navigation or the sand is from an upland source.</li> <li>• Open water &amp; confined aquatic disposal, if Corps finds the material suitable.</li> </ul> <p>2. Beach nourishment associated with dredging when the primary purpose is not navigation requires at least a Category 2 review.</p> <p>3. Maintenance or new dredging<sup>10</sup> and/or disposal in or affecting a SAS<sup>3</sup> requires an Individual Permit.</p>

<p><b>6. Discharges of Dredged or Fill Material Incidental to the Construction of Bridges</b></p>	<p>1. Discharges of dredged or fill material incidental to the construction of bridges across navigable waters of the U.S., including cofferdams, abutments, foundation seals, piers, and temporary construction and access fills provided the U.S. Coast Guard authorizes such discharges as part of the bridge permit or appropriate approval. 2. Causeways and approach fills are not included in this category and require Category 2 or Individual Permit authorization.</p>	<p>&lt;1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided:</p> <ul style="list-style-type: none"> <li>• Temporary or permanent fill in eelgrass<sup>14</sup> &lt;1000 SF.</li> <li>• Permanent fill in SAS (excluding eelgrass<sup>14</sup>) &lt;4300 SF.</li> </ul>
<p><b>7. Bank and Shoreline Stabilization</b></p>	<p>1. Bank stabilization projects &lt;200 linear feet provided:</p> <ul style="list-style-type: none"> <li>• ≤1 cubic yard of fill per linear foot placed along the bank waterward of high tide line. No fill or equipment will occur in SAS<sup>3</sup>.</li> <li>• Work conducted in the intertidal zone must be conducted in-the-dry during low water.</li> <li>• No structures angled steeper than 1H:1V and only rough-faced stone or fiber roll revetments allowed.</li> <li>• No driving of piles or sheeting.</li> </ul> <p>2. Bank stabilization projects in excess of 200 linear feet (Applicant or Applicant + Abutters combined) must undergo Category 2 review.</p>	<p>1. Work not eligible for Category 1. 2. &lt;1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided:</p> <ul style="list-style-type: none"> <li>• Temporary or permanent fill in eelgrass<sup>14</sup> &lt;1000 SF.</li> <li>• Permanent fill in SAS (excluding eelgrass<sup>14</sup>) &lt;4300 SF.</li> </ul>
<p><b>8. Residential, Commercial, and Institutional Developments, and Recreational Facilities</b></p>	<p>Not Eligible</p>	<p>1. &lt;1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided:</p> <ul style="list-style-type: none"> <li>• Temporary or permanent fill in eelgrass<sup>14</sup> &lt;1000 SF.</li> <li>• Permanent fill in SAS (excluding eelgrass<sup>14</sup>) &lt;4300 SF.</li> </ul> <p>2. Conversions of previously authorized pile supported buildings over navigable waters to residences, offices, or other non-water dependent uses require at least a Category 2 review. 3. Floating house boats or businesses on floats require Category 2 review.</p>
<p><b>9. Utility Line Activities</b></p>	<p>1. Repair or maintenance of existing, currently serviceable, authorized utilities with no expansion or change in use:</p> <ul style="list-style-type: none"> <li>• Conditions of the original authorization apply.</li> <li>• Trenching or filling is confined to the existing footprint.</li> <li>• In water work conducted between Nov 8 and Apr 9.</li> <li>• No new impact to SAS.</li> </ul> <p>2. Particularly relevant is GC12. 3. <u>New work in, over, or under navigable waters</u> requires a PCN and Category 2 review. 4. Except for aerial utility lines, work is not eligible for Category 1 if conducted in tidal portions of the Penobscot River upstream of a line extending from Turner Point in Castine to Moose Point (formerly</p>	<p>1. New or replacement installations or work not otherwise eligible for Category 1. 2. &lt;1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided:</p> <ul style="list-style-type: none"> <li>• Temporary or permanent fill in eelgrass<sup>14</sup> &lt;1000 SF.</li> <li>• Permanent fill in SAS (excluding eelgrass<sup>14</sup>) &lt;4300 SF.</li> </ul> <p>3. Particularly relevant is GC12</p>

	Squaw Point) on Cape Jellison in Stockton Springs or in tidal	
<b>10. Linear Transportation Projects (Not Including Stream Crossings)</b>	Not eligible	<p>&lt;1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided:</p> <ul style="list-style-type: none"> <li>• Temporary or permanent fill in eelgrass<sup>14</sup> &lt;1000 SF.</li> <li>• Permanent fill in SAS (excluding eelgrass<sup>14</sup>) &lt;4300 SF.</li> </ul>
<b>11. Mining Activities</b>	Not Eligible	Not Eligible
<b>12. Boat Ramps and Marine Railways</b>	<ol style="list-style-type: none"> <li>1. No new impact to SAS</li> <li>2. Marine railway and boat ramp work not eligible for maintenance<sup>7</sup> (i.e. not currently serviceable<sup>7</sup>) may be replaced “in-kind” with minor deviations<sup>7</sup> provided: <ul style="list-style-type: none"> <li>• Work is in the intertidal zone.</li> <li>• No fill expansion below high tide line.</li> <li>• Work conducted in-the-dry during low water.</li> </ul> </li> <li>3. No new boat ramps or marine railways.</li> </ol>	<ol style="list-style-type: none"> <li>1. Work not eligible for Category 1</li> <li>2. &lt;1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided: <ul style="list-style-type: none"> <li>• Temporary or permanent fill in eelgrass<sup>14</sup> &lt;1000 SF.</li> <li>• Permanent fill in SAS (excluding eelgrass<sup>14</sup>) &lt;4300 SF.</li> </ul> </li> </ol>
<b>13. Land and Water-Based Renewable Energy Generation Facilities and Hydropower Projects</b>	Not Eligible	<ol style="list-style-type: none"> <li>1. &lt;1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided: <ul style="list-style-type: none"> <li>• Temporary or permanent fill in eelgrass<sup>14</sup> &lt;1000 SF.</li> <li>• Permanent fill in SAS (excluding eelgrass<sup>14</sup>) &lt;4300 SF.</li> </ul> </li> <li>2. No new impoundments.</li> </ol>
<b>14. Reshaping Existing Drainage Ditches and Mosquito Management</b>	<ol style="list-style-type: none"> <li>1. ≤500 linear feet of drainage ditch will be modified. The reshaping of the ditch cannot increase drainage capacity beyond the original as-built capacity nor can it expand the area drained by the ditch as originally constructed (i.e., the capacity of the ditch must be the same as originally constructed and it cannot drain additional wetlands or other waters of the U.S.).</li> <li>2. No new ditches or relocation of drainage ditches constructed in waters of the U.S.; the location of the centerline of the reshaped drainage ditch must be approximately the same as the location of the centerline of the original drainage ditch.</li> <li>3. No effect on federally listed endangered or threatened species or critical habitat</li> </ol>	<ol style="list-style-type: none"> <li>1. Work not eligible for Category 1</li> <li>2. &lt;1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided: <ul style="list-style-type: none"> <li>• Temporary or permanent fill in eelgrass<sup>14</sup> &lt;1000 SF.</li> <li>• Permanent fill in SAS (excluding eelgrass<sup>14</sup>) &lt;4300 SF.</li> </ul> </li> </ol>

<p><b>15. Oil Spill and Hazardous Material Cleanup</b></p>	<p>Jurisdictional activities required for the containment and cleanup of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 and any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. SAS<sup>3</sup> must typically be restored in place at the same elevation.</p> <p><i>Note: SVNf or a surrogate state reporting form may be submitted after the fact. No SVNf is required for Category 1 eligible containment booms.</i></p>	<p>Work not eligible for Category 1</p>
<p><b>16. Cleanup of Hazardous and Toxic Waste</b></p>	<p>Not eligible - except for booms placed for hazardous and toxic waste containment and absorption and prevention which are eligible for SV.</p> <p><i>Note: No SVNf is required for Category 1 eligible containment booms.</i></p>	<p>Specific jurisdictional activities with impacts of any area required to affect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority. Wetlands and other SAS must typically be restored in place at the same elevation to qualify.</p>
<p><b>17. Scientific Measurement Devices</b></p>	<p>Scientific measurement devices whose purpose is to measure and record scientific data, such as staff gages, water recording devices, water quality testing and improvement devices, and similar structures. Structures may not restrict or concentrate movement of aquatic organisms; no activity results in a hazard to navigation; and no activity requiring underwater blasting.</p>	<p>1. Work not eligible for Category 1  2. &lt;1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided:</p> <ul style="list-style-type: none"> <li>• Temporary or permanent fill in eelgrass<sup>14</sup> &lt;1000 SF.</li> <li>• Permanent fill in SAS (excluding eelgrass<sup>14</sup>) &lt;4300 SF.</li> </ul>
<p><b>18. Survey Activities</b></p>	<p>Jurisdictional survey activities such as exploratory drilling, surveying and sampling activities, excluding any biological sampling devices. Does not include any activity requiring underwater blasting, seismic exploratory operations, or oil and gas exploration and fill for roads or construction pads. No activity may result in a hazard to navigation.</p>	<p>1. Work not eligible for Category 1  2. &lt;1 acre temporary or permanent fill, excavation and/or secondary impacts (e.g., areas drained, flooded, fragmented or mechanically cleared). Fill area includes all temporary and permanent waterway fills, provided:</p> <ul style="list-style-type: none"> <li>• Temporary or permanent fill in eelgrass<sup>14</sup> &lt;1000 SF.</li> <li>• Permanent fill in SAS (excluding eelgrass<sup>14</sup>) &lt;4300 SF.</li> </ul>
<p><b>19. Agricultural Activities</b></p>	<p>Not Eligible</p>	<p>Not Eligible</p>

<p><b>20. Fish &amp; Wildlife Harvesting, Enhancement and Attraction Devices and Activities (Not Aquaculture)</b></p>	<p>Fish and wildlife harvesting, enhancement, and attraction devices and activities such as pound nets, crab traps, crab dredging, eel pots, lobster traps, and clam and oyster digging, and small fish attraction devices such as open water fish concentrators (sea kites, etc.). This does not authorize artificial reefs or impoundments and semi-impoundments of waters of the U.S. for the culture or holding of motile species such as lobster, or the use of covered oyster trays or clam racks. No activity that may result in a hazard to navigation. <i>Note: A SVNFF is not required for these Category 1 eligible devices and activities.</i></p>	<p>1. Work not eligible for Category 1. 2. Impoundments or semi-impoundments of waters of the U.S. for the culture or holding of motile species such as lobster and new fish weirs with an impounded area <math>\leq</math> 1/2 acre.  For Aquaculture operations, refer to Activity 24.</p>
<p><b>21. Habitat Restoration, Establishment and Enhancement Activities</b></p>	<p>1. Cultch placement in tidal waters is eligible for SV provided there are no salt marsh or vegetated shallow impacts. 2. SAS planting and transplanting <math>\leq</math> 100 SF in tidal waters; 3. No artificial or living reefs. 4. The activity is authorized in writing by a local, state, or non-Corps federal environmental agency. Water impoundments require PCN. 5. No conversion of i) a stream to wetland or vice versa, wetland to a pond or uplands, and ii) one wetland type to another. 6. No dam removal. 7. Shellfish habitat enhancement such as brushing the flats is eligible for Category 1, <i>but not the use of netting which requires Category 2 review.</i></p>	<p>1. Work not eligible for Category 1. 2. Aquatic habitat restoration, establishment and enhancement provided those activities are proactive and result in net increases in aquatic resource functions and services.<sup>8</sup></p>
<p><b>22. Previously Authorized Activities</b></p>	<p>Any work not commenced nor completed that was authorized in a written letter from the Corps under the GP in effect between October 12, 2010 and October 12, 2015. The terms and general conditions of this GP apply along with any special conditions in the written authorization.</p>	
<p><b>23. Stream &amp; Wetland Crossings</b></p>	<p>Not Eligible</p>	<p>All temporary or permanent crossings of tidal navigable waters or adjacent tidal wetlands not eligible as maintenance require a PCN. GC 45 applies</p>
<p><b>24. Aquaculture</b></p>	<p>Not Eligible</p>	<p>Shellfish &amp; finfish aquaculture (with the exception of Atlantic salmon and any other salmonid, or other federally listed endangered or threatened species), or other aquaculture facilities with no more than minimal individual and cumulative impacts to environmental resources or navigation. This is inclusive but not limited to cages, nets, bags, racks, long lines, fences, posts, poles, predator screening, etc. Aquaculture guidelines are provided at: <a href="http://www.maine.gov/dmr/aquaculture/index.htm">www.maine.gov/dmr/aquaculture/index.htm</a>.</p>

## **Endnotes/Definitions**

**<sup>1</sup> Bordering and Contiguous Wetlands:** A bordering wetland is immediately next to its adjacent waterbody and may lie at, or below, the ordinary high water mark (mean high water in navigable waters) of that waterbody and is directly influenced by its hydrologic regime. Contiguous wetlands extend landward from their adjacent waterbody to a point where a natural or manmade discontinuity exists. Contiguous wetlands include bordering wetlands as well as wetlands that are situated immediately above the ordinary high water mark and above the normal hydrologic influence of their adjacent waterbody. Note, with respect to the federally designated navigable rivers, the wetlands bordering and contiguous to the tidally influenced portions of those rivers are reviewed under “II. Navigable Waters.”

## **<sup>2</sup> Direct, Secondary, and Cumulative Impacts/Effects:**

**Direct Impacts:** The immediate loss of aquatic ecosystem within the footprint of the fill.

**Secondary Impacts:** These are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material. Information about secondary effects on aquatic ecosystems shall be considered prior to the time final section 404 action is taken by permitting authorities. Some examples of secondary effects on an aquatic ecosystem are a) fluctuating water levels in all impoundment and downstream associated with the operation of a dam, b) septic tank leaching and surface runoff from residential or commercial developments on fill, and c) leachate and runoff from a sanitary landfill located in waters of the U.S. Put another way, secondary effects are those impacts outside the footprint of the fill that arise from and are associated with the discharge of dredged or fill material, including the operation of an activity or facility associated with the discharge. Examples may include habitat fragmentation; interruption of travel corridors for wildlife (for example, for amphibians that migrate to and from seasonal or vernal pools used as breeding habitat); hydrologic regime changes; and impacts from operation and maintenance activities for constructed facilities; such as noise/lighting, storm water runoff, and road kill of wetland dependent wildlife. Using the directions contained in the guidelines, we consider the circumstances of a proposed discharge and the project of which it is a part to evaluate the scope, extent, severity, and permanence of direct, secondary, and cumulative adverse effects upon the aquatic ecosystem.

**Cumulative Impacts:** The extent of past, present, and foreseeable developments in the area may be an important consideration in evaluating the significance of a particular project’s impacts. Although the impacts associated with a particular discharge may be minor, the cumulative effect of numerous similar discharges can result in a large impact. Cumulative impacts should be estimated only to the extent that they are reasonable and practical.

**<sup>3</sup> Special Aquatic Sites:** Includes wetlands and saltmarsh, mudflats, riffles and pools, and vegetated shallows (predominantly comprised of eelgrass in Maine).

**<sup>4</sup> Construction Mats:** Constructions, swamp and timber mats (herein referred to as “construction mats”) are generic terms used to describe structures that distribute equipment weight to prevent wetland damage while facilitating passage and providing work platforms for workers and equipment. They are comprised of sheets or mats made from a variety of materials in various sizes. A timber mat consists of large timbers bolted or cabled together. Corduroy roads, which are not considered to be construction mats, are cut trees and/or saplings with the crowns and branches removed, and the trunks lined up next to one another. Corduroy roads are typically installed as permanent structures. Like construction mats, they are considered as fill whether they’re installed temporarily or permanently.

**<sup>5</sup> Vernal Pools:** A vernal pool, also referred to as a seasonal forest pool, is a temporary to semi-permanent body of water occurring in a shallow depression that typically fills during the spring or fall and may dry during the summer. Vernal pools have no permanent inlet or outlet and no viable populations of predatory fish. A vernal pool may provide the primary breeding habitat for wood frogs (*Rana sylvatica*), spotted salamanders (*Ambystoma maculatum*), blue-spotted salamanders (*Ambystoma laterale*), and fairy shrimp (*Eubranchipus* sp.), as well as valuable habitat for other plants and wildlife, including several rare, threatened, and endangered species. A vernal pool intentionally created for the purposes of compensatory mitigation is included in this definition. For the purposes of this GP, the presence of any of the following species in any life stage in any abundance level/quantity would designate the waterbody as a vernal pool: fairy shrimp, blue spotted salamanders, spotted salamanders or wood frogs. The Corps may determine during a Category 2 review that a waterbody should not be regulated as a VP based on available evidence. For the purposes of this GP, the VP Management Areas are the: Vernal Pool Depression (includes the vernal pool depression up to the spring or fall high water mark, and includes any vegetation growing within the depression), Vernal Pool Envelope (area within 100 FT of the VP Depression’s edge) and Critical Terrestrial Habitat (area within 100-750 FT of the Vernal Pool Depression’s edge). [\*Note: Critical Terrestrial Habitat is defined as 100 -750 FT on page 243 of the document “Science and Conservation of Vernal Pools in Northeastern North America.” Calhoun and deMaynadier, 2008, which is referenced in Appendix G, page 3, Paragraph 10(b).

<sup>6</sup> **Water Diversions:** Water diversions are activities such as bypass pumping or water withdrawals. Temporary flume pipes, culverts or cofferdams where normal flows are maintained within the stream boundary's confines aren't water diversions. "Normal flows" are defined as no change in flow from pre-project conditions.

<sup>7</sup> **Maintenance: a)** The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3 – "Activities occurring before certain dates," provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification.

- Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make repair, rehabilitation, or replacement are authorized.
- Currently serviceable means useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.
- No seaward expansion for bulkheads or any other fill activity is considered Category 1 maintenance.
- Only structures or fills that were previously authorized and are in compliance with the terms and condition of the original authorization can be maintained as a non-regulated activity under 33 CFR 323.4(a)(2), or in accordance with the Category 1 or 2 thresholds in Appendix A.

**b)** The state's maintenance provisions may differ from the Corps and may require reporting and written authorization from the state.

**c)** Contact the Corps to determine whether stream crossing replacements require a written application to the Corps for at least a Category 2 review.

**d)** Exempted Maintenance. In accordance with 33 CFR 323.4(a)(2), any discharge of dredged or fill material that may result from any of the following activities is not prohibited by or otherwise subject to regulation under Section 404 of the CWA: "Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design."

<sup>8</sup> **Aquatic Habitat Restoration, Establishment and Enhancement:** The Corps will decide if a project qualifies and must determine in consultation with federal and state agencies that the net effects are beneficial. The Corps may refer to Nationwide Permit 27 published in the 3/12/07 Federal Register. Activities authorized here may include, but are not limited to: the removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms; the installation of current deflectors; the enhancement, restoration, or establishment of riffle and pool stream structure; the placement of in-stream habitat structures; modifications of the stream bed and/or banks to restore or establish stream meanders; the backfilling of artificial channels and drainage ditches; the removal of existing drainage structures; the construction of small nesting islands in inland waters; the construction of open water areas; the construction of native shellfish species habitat over unvegetated bottom for the purpose of habitat protection or restoration in tidal waters; shellfish seeding; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; mechanized land clearing to remove non-native invasive, exotic, or nuisance vegetation; and other related activities. Only native plant species should be planted at the site.

<sup>9</sup> **Brushing the Flats:** The placement of tree boughs, wooden lath structure, or small-mesh fencing on mudflats to enhance recruitment of soft-shell clams (*Mya arenaria*).

<sup>10</sup> **Maintenance Dredging:** This includes only those areas and depths previously authorized by the Corps and dredged. The Corps may require proof of authorization. Maintenance dredging typically refers to the routine removal of sediment to maintain the design depths of serviceable navigation channels, harbors, basins, marinas, boat launches, and port facilities. Maintenance dredging is conducted for navigational purposes and does not include any expansion of the previously dredged area or depth. The Corps may review a maintenance dredging activity as new dredging if sufficient time has elapsed to allow for the colonization of SAS, shellfish, etc.

<sup>11</sup> **Boating Facilities:** Facilities that provide for a fee, rent, or sell mooring space, such as marinas, yacht clubs, boat clubs, boat yards, town facilities, dockominiums, etc.

<sup>12</sup> **Federal Navigation Projects (FNPs):** FNPs are comprised of Federal Channels and Federal Anchorages. See Appendix F for their location and contact the Corps for more information. "Horizontal Limits" is the outer edge of an FNP. "Buffer Zone" is equal to three times the authorized depth of that channel.

<sup>13</sup> **Horizontal Limits:** The outer edge of a Federal Navigation Project (FNP). See Appendix F and contact the Corps for information on FNP's.

<sup>14</sup> **Eelgrass (*Zostera marina*):** A type of rooted aquatic vegetation that exists in intertidal and shallow subtidal areas known as vegetated shallows. See [www.nero.noaa.gov/hcd/](http://www.nero.noaa.gov/hcd/) for eelgrass survey guidance. Note: Eelgrass surveys should be conducted between May and October unless otherwise directed.

<sup>15</sup> **Structures:** The height of structures shall at all points be equal to or exceed the width of the deck. For the purpose of this definition, height shall be measured from the marsh substrate to the bottom of the longitudinal support beam.

<sup>16</sup> **Agricultural Activities:** The Clean Water Act exempts certain discharges associated with normal farming, ranching, and forestry activities such as plowing, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices (Section 404(f)(1)(A)). Applicants are strongly advised to contact the Corps for a determination of whether their activity is exempt or requires a permit.



**Appendix B: Self-Verification Notification Form**  
(for all tidal and non-tidal projects in Maine subject to Corps jurisdiction)

**US Army Corps  
of Engineers**®  
New England District

At least two weeks before work commences, complete **all** fields (write “none” if applicable) below or use the fillable form at [www.nae.usace.army.mil/missions/regulatory.aspx](http://www.nae.usace.army.mil/missions/regulatory.aspx). Send this form, a location map, any project plans, and an Official Species List (See GC 8) to the address noted below; fax to (207) 623-8206; or email to [jay.l.clement@usace.army.mil](mailto:jay.l.clement@usace.army.mil). The two-week lead time is not required for emergency situations (see page 4 for definition). Please call (207) 623-8367 with questions.

Maine Project Office  
U.S. Army Corps of Engineers  
New England District  
675 Western Avenue #3  
Manchester, Maine 04351

State Permit Number: \_\_\_\_\_  
Date of State Permit: \_\_\_\_\_  
State Project Manager: \_\_\_\_\_

Permittee: \_\_\_\_\_  
Address, City, State & Zip: \_\_\_\_\_  
Phone(s) and Email: \_\_\_\_\_

Contractor: \_\_\_\_\_  
Address, City, State & Zip: \_\_\_\_\_  
Phone(s) and Email: \_\_\_\_\_

Consultant/Engineer/Designer: \_\_\_\_\_  
Address, City, State & Zip: \_\_\_\_\_  
Phone(s) and Email: \_\_\_\_\_

Wetland/Vernal Pool Consultant: \_\_\_\_\_  
Address, City, State & Zip: \_\_\_\_\_  
Phone(s) and Email: \_\_\_\_\_

Project Location/Description: \_\_\_\_\_  
Address, City, State & Zip: \_\_\_\_\_  
Latitude/Longitude Coordinates: \_\_\_\_\_ Tax Map/Lot: \_\_\_\_\_  
Waterway Name: \_\_\_\_\_  
Work Description: \_\_\_\_\_

Provide any prior Corps permit numbers: \_\_\_\_\_  
Proposed Work Dates: Start: \_\_\_\_\_ Finish: \_\_\_\_\_

Area of wetland impact: \_\_\_\_\_ SF (leave blank if work involves structures & no fill in Navigable Waters)  
Area of waterway impact: \_\_\_\_\_ SF (leave blank if work involves structures & no fill in Navigable Waters)  
Area of compensatory mitigation provided: \_\_\_\_\_ SF

Work will be done under the following Appendix A categories (circle all that apply):  
I. Inland Waters and wetlands: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24  
II. Navigable Waters: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Your name/signature below, as permittee, indicates that you accept and agree to comply with the terms, eligibility criteria, and general conditions of Category 1 of the Maine General Permit.

Permittee Printed Name: \_\_\_\_\_  
Permittee Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## **Appendix C: Content of Pre-Construction Notification**

In addition to the following required information, the applicant must provide additional information as the Corps deems essential to make a public interest determination including, where applicable, a determination of compliance with the Section 404(b)(1) guidelines or ocean dumping criteria. Such additional information may include environmental data and information on alternate methods and sites as may be necessary for the preparation of the required environmental documentation. For a more comprehensive checklist, go to [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) >> Forms >> Application and Plan Guideline Checklist. Please check with the Corps for project-specific requirements.

### **Information required for all projects:**

- Corps application form ([ENG Form 4345](#)) or appropriate state application form (see Appendix E). Forms may need to be supplemented to include the information noted below.
- Proof of notification to the SHPO and the appropriate THPOs (see Appendix E).
- Official Species List for any federally listed endangered or threatened species (Instructions at Appendix D)
- Drawings, sketches, or plans (detailed engineering plans and specifications are not required) that are legible, reproducible (color is encouraged, but features must be distinguishable in black and white), no larger than 11"x17", with bar scale. Wetland area impact sheets should have the highest resolution possible to show work within Corps jurisdiction (do not just reduce project overview or cut large-scale plan into quadrant sheets). Provide locus map and a plan overview of the entire property with a key index to the individual impact sheets. A locus map on a section of color USGS topographic map is encouraged. Digital submissions are encouraged.
- Include:
  - All direct, secondary, permanent and temporary effects the project would cause, including the anticipated amount of impacts to waters of the U.S. expected to result from the activity, in acres, linear feet, or other appropriate unit of measure.
  - Any historic permanent fill associated with each single and complete project.
  - Cross-section views of all wetland and waterway fill areas and wetland replication areas.
  - Delineation of all wetlands, other special aquatic sites (vegetated shallows, saltmarsh, mudflats, riffles and pools, coral reefs, and sanctuaries and refuges), and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Use Federal delineation methods and include Corps wetland delineation data sheets (see GC 2).
  - MLW and MHW elevations in tidal waters. Show the HTL elevations when fill is involved. Show OHW elevation in lakes and non-tidal streams.
  - Existing and proposed conditions.
  - For vegetated shallow and eelgrass survey guidance, see [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) >> Jurisdictional Limits and Wetlands >> Submerged Aquatic Vegetation Survey Guidance for the New England Region.
  - Show all known VPs on the project site. See GC 23 for vernal pool identification requirements.
- Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands, below OHW in inland waters and below the HTL in coastal waters.

- An Official Species List of federally “listed species or critical habitat” present in the action area (see GC 8).
- A restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions (see GC 43).

**Information that may be required:**

- Photographs of wetland/waterway to be impacted. Photos at low tide are preferred for work in tidal waters.
- For drawings, sketches, or plans:
  - The vertical datum for all coastal projects must be in U.S. survey feet and referenced to MLLW and current tidal epochs, with a reference chart showing conversion factor to NAVD88; do not use local datum. See [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) >> Forms and Publications >>Vertical Datum - FEMA (Jul 2007);
  - The horizontal state plane coordinates shall be in U.S. survey feet and based on the appropriate state plane coordinate system.
- For the construction of a filled area or pile or float-supported platform, the use of, and specific structures to be erected on, the fill or platform.
- For the discharge of dredged or fill material into waters of the U.S. or the transportation of dredged material for the purpose of disposing of it in ocean waters, the source of the material; the purpose of the discharge, a description of the type, composition and quantity of the material; the method of transportation and disposal of the material; and the location of the disposal site.
- For the discharge of dredged or fill material into waters of the U.S., include a statement describing how impacts to waters of the U.S. are to be avoided and minimized. Include either a statement describing how impacts to waters of the U.S. are to be compensated for or a statement explaining why compensatory mitigation should not be required for the proposed impacts.
- Purpose and need for the proposed activity;
- Limits and coordinates of any Federal Navigation Project in the vicinity of the project area.
- Limits and coordinates of any proposed mooring field, reconfiguration zone or aquaculture activity. Provide coordinates for all corners;
- Schedule of construction/activity;
- Names and addresses of adjoining property owners;
- Location and dimensions of adjacent structures;
- List of authorizations required by other Federal, interstate, state, or local agencies for the work, including all approvals received or denials already made.
- Identification and description of potential impacts to Essential Fish Habitat (defined at VI. Definitions and Acronyms).
- Identification of potential discharges of pollutants to waters, including potential impacts to impaired waters, in the project area (see GC 19).
- Invasive Species Control Plan (see GC 24). For sample control plans, see [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) >> Invasive Species.
- Wildlife Action Plan (WAP) maps. Contact Maine Inland Fisheries & Wildlife (Appendix E) or on line at [http://www.maine.gov/ifw/wildlife/conservation/action\\_plan.html](http://www.maine.gov/ifw/wildlife/conservation/action_plan.html)

**Information for dredging projects that may be required:**

- Sediment testing, including physical (e.g., grain-size analysis), chemical and biological testing. For projects proposing open water disposal, applicants are encouraged to contact the Corps as early as possible regarding sampling and testing protocols. Sampling and testing of sediments without such contact should not occur and if done, would be at the applicant’s risk.
- The area in square feet and volume of material to be dredged below mean high water.

- Existing and proposed water depths.
- Type of dredging equipment to be used.
- Nature of material (e.g., silty sand).
- Any existing sediment grain size and bulk sediment chemistry data for the proposed or any nearby projects.
- Information on the location and nature of municipal or industrial discharges and occurrence of any contaminant spills in or near the project area.
- Shellfish survey.
- Location of the disposal site (include locus sheet).
- Identification and description of any potential impacts to Essential Fish Habitat.
- Delineation of submerged aquatic vegetation (e.g., eelgrass beds).

**Information for aquaculture projects that may be required:**

- Maine Aquaculture guidelines and joint Corps/Maine DMR applications may be found at: [www.maine.gov/dmr/aquaculture/index.htm](http://www.maine.gov/dmr/aquaculture/index.htm).
- In addition to the information required above, applications must also include:
  - Whether canopy predator nets are being used.

## Appendix D: Instruction for USFWS IPaC Project Builder/Official Species List

NOTE: These instructions are subject to change by the USFWS. Users should check this GP's Corps webpage for the latest instructions or click [here](#).

In your internet browser go to <http://ecos.fws.gov/ipac/>

1. Click on get started.
2. Click on enter project location.
3. Search or zoom to your project location. (You can enter an address and then zoom in with your mouse).
4. Define your area. (Select the polygon tool and click around the boundary of your project.) or (Use the draw a line tool for linear projects)

Note: You can change/select the map from Streets to Satellite or Topo in the lower left corner of the map.

5. Click finished drawing then click confirm and select continue.

6. On the next page under Tasks (lower left), select Request an official species list. The pane will open. Select "request official species list" again.

7. A new page will open. Fill in the project information blanks with the project name, brief description, project type, lead agency, and contact information. Be sure to check the box to verify this is a legitimate project. Click on Submit Official Species List Request.

8. You will be sent an e-mail with instructions to complete the request by clicking on the link provided.

9. The site will open Official Species List Request Completed. Under the Maine Ecological Services Field Office address you will see "Official Species List Document". Click on that link and your document will open. Save and or print a copy and **include the entire report with your application.**

Note, you will receive a second e-mail with the same information. You can save the link in the event you need to return to the IPaC site for an updated list.

If a period of time has passed since your initial "Official Species List" identifier number was generated, you may choose to generate an "UPDATED SPECIES LIST". To do this, return to the IPaC homepage at <http://ecos.fws.gov/ipac> site. In the middle of the page, click the purple "Need an updated species list" link.

On the request an "Updated Official Species List" page, complete the information in the boxes provided. You will need the project specific official consultation code generated and stated on the original official list as well as the email address entered with the original submission.

Click "Request Updated Species List". Print, or save.

## Appendix E: Contacts and Tribal Areas of Interest

### 1. Federal

U.S. Army Corps of Engineers  
Maine Project Office  
675 Western Avenue #3  
Manchester, ME 04351  
(207) 623-8367 (phone); (207) 623-8206 (fax)

Federal Emergency Management Agency  
99 High St.  
Boston, MA 02110  
(877) 336-2734 (phone)  
*(Flood Plain Management)*

U.S. Environmental Protection Agency  
5 Post Office Square  
Suite 100 (OEP05-2)  
Boston, MA 02109-3912  
(617) 918-1589 (phone)

National Marine Fisheries Service  
55 Great Republic Drive  
Gloucester, MA 01930  
(978) 281-9102 (phone); (978) 281-9301 (fax)  
*(Federal endangered species & EFH)*

U.S. Fish and Wildlife Service  
Maine Field Office  
17 Godfrey Drive, Suite 2  
Orono, ME 04473  
(207) 866-3344 (phone); (207) 866-3351 (fax)  
*(Federal endangered species)*

National Park Service  
North Atlantic Region  
15 State Street  
Boston, MA 02109  
(617) 223-5203 (phone)  
*(Wild and Scenic Rivers)*

National Marine Fisheries Service  
Maine Field Office  
17 Godfrey Drive Suite 1  
Orono, ME 04473  
(207) 866-7379 (phone); (207) 866-7342 (fax)  
*(Federal endangered species)*

Commander (dpb)  
First Coast Guard District  
One South Street - Battery Bldg  
New York, NY 10004-1466  
(212) 668-7021 (phone); (212) 668-7967 (fax)  
*(bridge permits)*

### 2. State of Maine

#### a. Department of Environmental Protection *(State permits & Water Quality Certifications)*

Division of Land Resource Regulation  
Bureau of Land and Water Quality  
17 State House Station  
Augusta, Maine 04333  
(207) 287-7688 (phone)

Eastern Maine Regional Office  
106 Hogan Road  
Bangor, Maine 04401  
(207) 941-4570 (phone)

Southern Maine Regional Office  
312 Canco Road  
Portland, Maine 04103  
(201) 822-6300 (phone)

Northern Maine Regional Office  
1235 Central Drive - Skyway Park  
Presque Isle, Maine 04769  
(207) 764-0477 (phone)

b. Department of Agriculture, Conservation and Forestry

i. Maine Land Use Planning Commission (LUPC) (*State permits & Water Quality Certifications in the unorganized areas of the State*)

Augusta Office  
22 State House Station  
Augusta, Maine 04333-0022  
(207) 287-2631 (phone); (207) 287-7439 (fax)

Downeast Regional Office  
106 Hogan Rd, Suite 8  
Dorothea Dix Complex  
Bangor, Maine 04401  
(207) 941-4052 (phone); (207) 941-4222 (fax)

Greenville Regional Office  
43 Lakeview Drive  
P.O. Box 1107  
Greenville, Maine 04441  
(207) 695-2466 (phone); (207) 695-2380 (fax)

Ashland Regional Office  
45 Radar Road  
Ashland, ME 04732-3600  
(207) 435-7963 (phone); (207) 435-7184 (fax)

Rangley Regional Office  
133 Fyfe Road  
PO Box 307  
West Farmington, ME 04992  
(207) 670-7493 (phone); (207) 287-7439 (fax)

East Millinocket Regional Office  
191 Main Street  
East Millinocket, ME 04430  
(207) 746-2244 (phone); (207) 746-2243 (fax)

ii. Maine Coastal Program

Department of Agriculture, Conservation and Forestry  
Bureau of Resource Information and Land Use Planning  
17 Elkins Lane {physical address}  
State House Station 93  
Augusta, Maine 04333-0038  
(207) 287-2801 (phone); (207) 287-2353 (fax)  
(*CZM consistency determinations*)

iii. Division of Parks and Public Lands

22 State House Station  
Augusta, Maine 04333  
(207) 287-3061 (phone); (207) 287-6170 (fax)  
(*submerged lands leases*)

c. Department of Marine Resources

P.O. Box 8  
West Boothbay Harbor, Maine 04575  
(207) 633-9500 (phone); (207) 624-6024 (fax)  
(*aquaculture leases*)

**3. Historic Properties**

a. State Historic Preservation Officer (SHPO)

Mr. Kirk F. Mohney, Director

Maine Historic Preservation Commission (MHPC)  
65 State House Station  
Augusta, Maine 04333-0065  
(207) 287-2132 (phone); (207) 287-2335 (fax)  
Area of concern: The entire State of Maine

b. Tribal Historic Preservation Officers (THPOs)

Note: The area of concern for each tribe is the entire State of Maine

THPO & Environmental Planner  
*Houlton Band of Maliseet Indians*  
88 Bell Road  
Littleton, Maine 04730  
(207) 532-4273, x215 (phone)  
(207) 532-6883 (fax)  
envplanner@maliseets.com  
ogs1@maliseets.com

THPO  
*Aroostook Band of Micmacs*  
7 Northern Road  
Presque Isle, Maine 04769  
(207) 764-1972 (phone); (207) 764-7667 (fax)  
jpictou@mimca-nsn.gov

THPO  
*Passamaquoddy Tribe of Indians*  
Pleasant Point Reservation  
P.O. Box 343  
Perry, Maine 04667  
(207) 853-2600 (phone); (207) 853-6039 (fax)  
soctomah@gmail.com

THPO  
*Penobscot Nation*  
Cultural and Historic Preservation Dept.  
12 Wabanaki Way  
Indian Island, Maine 04468  
(207) 817-7471 (phone)  
chris.sockalexis@penobscotnation.org

THPO  
*Passamaquoddy Tribe of Indians*  
Indian Township Reservation  
P.O. Box 301  
Princeton, Maine 04668  
(207) 796-2301 (phone)  
(207) 796-5256 (fax); soctomah@gmail.com

**4. Organizational Websites (Note – Subject to Change):**

U.S. Army Corps of Engineers, N.E. District	<a href="http://www.nae.usace.army.mil/missions/regulatory.aspx">www.nae.usace.army.mil/missions/regulatory.aspx</a>
U.S. Army Corps of Engineers, Headquarters	See above link>>Useful Links>>Federal Agency Links
U.S. Environmental Protection Agency	<a href="http://www.epa.gov/owow/wetlands">www.epa.gov/owow/wetlands</a>
National Marine Fisheries Service	<a href="http://www.nmfs.noaa.gov">www.nmfs.noaa.gov</a>
U.S. Fish and Wildlife Service	<a href="http://www.fws.gov/mainefieldoffice">www.fws.gov/mainefieldoffice</a>
National Park Service	<a href="http://www.nps.gov/rivers/index.html">www.nps.gov/rivers/index.html</a>
Maine Department of Environmental Protection	<a href="http://www.maine.gov/dep">www.maine.gov/dep</a>
Maine Department of Agriculture, Conservation and Forestry	<a href="http://www.maine.gov/acf/index.shtml">www.maine.gov/acf/index.shtml</a>
Maine Land Use Planning Commission	<a href="http://www.maine.gov/doc/lupc/commission/offices.shtml">www.maine.gov/doc/lupc/commission/offices.shtml</a>
Maine Department of Marine Resources	<a href="http://www.maine.gov/dmr/index.htm">www.maine.gov/dmr/index.htm</a>
State of Maine - Aquaculture Guidelines	<a href="http://www.maine.gov/dmr/aquaculture/index.htm">www.maine.gov/dmr/aquaculture/index.htm</a>

## Appendix F: Definitions

### Definitions

**Attendant Features:** Occurring with or as a result of; accompanying.

**Biodegradable:** A material that decomposes into elements found in nature within a reasonably short period of time and will not leave a residue of plastic or a petroleum derivative in the environment after degradation. Examples of biodegradable materials include jute, sisal, cotton, straw, burlap, coconut husk fiber (coir) or excelsior. In contrast, degradable plastics break down into plastic fragments that remain in the environment after degradation.

**Boating facilities:** These provide, rent or sell mooring space, such as marinas, yacht clubs, boat yards, dockminiums, town facilities, land/home owners, etc. Not classified as boating facilities are piers shared between two abutting properties or town mooring fields that charge an equitable user fee based on the actual costs incurred.

**Brushing the Flats:** The placement of tree boughs, wooden lath structure, or small-mesh fencing on mudflats, or any bottom disturbance (e.g., discing, plowing, raking, etc.), to enhance recruitment of shellfish.

**Buffer Zone:** The buffer zone of an FNP is equal to three times the authorized depth of the FNP.

**Construction mats:** Constructions, swamp and timber mats (herein referred to as “construction mats”) are generic terms used to describe structures that distribute equipment weight to prevent wetland damage while facilitating passage and providing work platforms for workers and equipment. They are comprised of sheets or mats made from a variety of materials in various sizes. A timber mat consists of large timbers bolted or cabled together. Corduroy roads, which are not considered to be construction mats, are cut trees and/or saplings with the crowns and branches removed, and the trunks lined up next to one another. Corduroy roads are typically installed as permanent structures. Like construction mats, they are considered as fill whether they are installed temporarily or permanently.

**Cumulative effects:** See “Direct, secondary, and cumulative effects.”

### **Direct, secondary, and cumulative effects:**

Direct Effects: The loss of aquatic ecosystem within the footprint of the discharge of dredged or fill material. Direct effects are caused by the action and occur at the same time and place.

Secondary Effects: These are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material. Information about secondary effects on aquatic ecosystems shall be considered prior to the time final Section 404 action is taken by permitting authorities. Some examples of secondary effects on an aquatic ecosystem are a) aquatic areas drained, flooded, fragmented, or mechanically cleared, b) fluctuating water levels in all impoundment and downstream associated with the operation of a dam, c) septic tank leaching and surface runoff from residential or commercial developments on fill, and d) leachate and runoff from a sanitary landfill located in waters of the U.S. See 40 CFR 230.11(h).

Cumulative Effects: The changes in an aquatic ecosystem that are attributable to the collective effect of a number of individual 1) discharges of dredged or fill material, or 2) structures. Although the impact of a particular discharge may constitute a minor change in itself, the cumulative effect of numerous such piecemeal changes can result in a major impairment of the water resources and interfere with the productivity and water quality of existing aquatic ecosystems. See 40 CFR 230(g).

### **Dredging:**

Maintenance Dredging: Includes areas and depths previously authorized by the Corps and dredged. The Corps may require proof of authorization. Maintenance dredging typically refers to the routine removal of accumulated sediment from channel beds to maintain the design depths of navigation channels, harbors, marinas, boat launches and port facilities. Routine maintenance dredging is conducted regularly for navigational purposes (typically at least once every ten years) and does not include any expansion of the previously dredged area or depth. The Corps may review a maintenance dredging activity as new dredging if sufficient time has elapsed to allow for the colonization of SAS,

shellfish, etc. The main characteristics of maintenance dredging projects are variable quantities of material; soft, uncompacted soil; contaminant content possible; thin layers of material; occurring in navigation channels and harbors; repetitive activity

**New Dredging:** Dredging of an area or to a depth that has never been authorized by the Corps or dredged.

**Dredged material & discharge of dredged material:** These are defined at 323.2(c) and (d). The term dredged material means material that is excavated or dredged from waters of the U.S.

**Essential Fish Habitat (EFH):** This is broadly defined to include those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.

**Fill material & discharge of fill material:** These are defined at 323.2(e) and (f). The term fill material is defined as material placed in waters of the U.S. where the material has the effect of either replacing any portion of a water of the U.S. with dry land or changing the bottom elevation of any portion of a water of the U.S.

**Federal anchorages, Federal channels and Federal turning basin:** Refer to Appendix H for those in Maine

**Federal navigation projects (FNPs):** These areas are maintained by the Corps; authorized, constructed and maintained on the premise that they will be accessible and available to all on equal terms; and are comprised of Federal Anchorages, Federal Channels and Federal Turning Basins. The buffer zone is equal to three times the authorized depth of a FNP. More information on the following FNPs is provided at [www.nae.usace.army.mil/missions/navigation.aspx](http://www.nae.usace.army.mil/missions/navigation.aspx) >> Navigation Projects.

**Flume:** An open artificial water channel, in the form of a gravity chute, that leads water from a diversion dam or weir completely aside a natural flow. A flume can be used to measure the rate of flow.

**Frac out:** During normal drilling operations, drilling fluid travels up the borehole into a pit. When the borehole becomes obstructed or the pressure becomes too great inside the borehole, the ground fractures and fluid escapes to the surface.

**Independent utility:** A test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

**Individual Permit:** A Department of the Army authorization that is issued following a case-by-case evaluation of a specific structure or work in accordance with the procedures of 33 CFR 322, or a specific project involving the proposed discharge(s) in accordance with the procedures of 33 CFR 323, and in accordance with the procedures of 33 CFR 325 and a determination that the proposed discharge is in the public interest pursuant to 33 CFR 320.

**Maintenance:** Regulations on maintenance are provided at 33 CFR 323.4. The following definitions are applicable:

**Minor deviations:** Deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards, which are necessary to make repair, rehabilitation, or replacement are permitted, provided the adverse environmental effects resulting from such repair, rehabilitation, or replacement are minimal.

**Currently serviceable:** Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

**Marina reconfiguration zone:** A Corps-authorized area in which permittees may rearrange pile-supported structures and floats without additional authorizations. A reconfiguration zone does not grant exclusive privileges to an area or an increase in structure or float area.

**Navigable waters of the U.S.:** See Waters of the U.S. below.

**Overall project:** See "single and complete linear project" below.

**Practicable:** Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

**Permanent impacts:** Permanent impacts means waters of the U.S. that are permanently affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent impacts include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. Temporary impacts include waters of the U.S. that are temporarily filled, flooded, excavated, drained or mechanically cleared because of the regulated activity.

**Pre-construction notification (PCN):** A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by this GP. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of these GPs. A PCN may be voluntarily submitted in cases where PCN is not required and the project proponent wants confirmation that the activity is authorized under this GP.

**Secondary effects:** See “Direct, secondary, and cumulative effects.”

**Single and complete linear project:** A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete project” is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the U.S. (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for the purposes of this GP. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

The overall project, for purposes of this GP, includes all regulated activities that are reasonably related and necessary to accomplish the project purpose.

**Single and complete non-linear project:** For non-linear projects, the term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. For non-linear projects, the single and complete project must have independent utility (see definition).

**Special aquatic sites:** These include inland and saltmarsh wetlands, mud flats, vegetated shallows, sanctuaries and refuges, coral reefs, and riffle and pool complexes. These are defined at 40 CFR 230 Subpart E.

**Stream channelization:** The manipulation of a stream’s course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

**Temporary impacts:** See permanent impacts above.

**Utility line:** Any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term ‘utility line’ does not include activities that drain a water of the U.S., such as drainage tile or French drains, but it does apply to pipes conveying drainage from another area.

**Vegetated shallows:** Permanently inundated areas that under normal circumstances support communities of rooted aquatic vegetation, such as eelgrass and widgeon grass (*Rupia maritima*) in marine systems (doesn’t include salt marsh) as well as a number of freshwater species in rivers and lakes. Note: These areas are also commonly referred to as submerged aquatic vegetation (SAV).

**Vernal pools (VPs):** For the purposes of this GP, VPs are depressional wetland basins that typically go dry in most years and may contain inlets or outlets, typically of intermittent flow. Vernal pools range in both size and depth depending upon landscape position and parent material(s). Pools usually

support one or more of the following obligate indicator species: wood frog, spotted salamander, blue-spotted salamander, marbled salamander, Jefferson's salamander and fairy shrimp. However, they should preclude sustainable populations of predatory fish.

VP areas are:

- Depression (includes the VP depression up to the spring or fall high water mark, and includes any vegetation growing within the depression),
- Envelope (area within 100 feet of the VP depression's edge), and
- Critical terrestrial habitat (area within 100-750 feet of the VP depression's edge).

Note: See footnote to GC 23. The Corps may determine during the PCN review that a waterbody should not be designated as a VP based on available evidence.

**Water diversions:** Water diversions are activities such as bypass pumping (e.g., "dam and pump") or water withdrawals. Temporary flume pipes, culverts or cofferdams where normal flows are maintained within the stream boundary's confines aren't water diversions. "Normal flows" are defined as no change in flow from pre-project conditions.

**Weir:** A barrier across a river designed to alter the flow characteristics. In most cases, weirs take the form of a barrier, smaller than most conventional dams, across a river that causes water to pool behind the structure (not unlike a dam) and allows water to flow over the top. Weirs are commonly used to alter the flow regime of the river, prevent flooding, measure discharge and help render a river navigable.

**Waters of the U.S. & Waters of the United States (U.S.):** The term waters of the U.S. and all other terms relating to the geographic scope of jurisdiction are defined at 33 CFR 328. Also see Section 502(7) of the Federal CWA [33 USC 1352(7)]. Waters of the U.S. include jurisdictional wetlands. Not all waters and wetlands are jurisdictional. Contact the Corps with any questions regarding jurisdiction.

**Navigable waters:** Refer to 33 CFR 329. These waters include the following federally designated navigable waters in New England. This list represents only those waterbodies for which affirmative determinations have been made; absence from this list should not be taken as an indication that the waterbody is not navigable:

ME: All tidal waters; Kennebec River to Moosehead Lake; Penobscot River to the confluence of the East and West Branch at Medway, Maine; Lake Umbagog within the State of Maine.

## Appendix G: Additional References

### 1. GC 2: Federal Jurisdictional Boundaries.

(a) Corps Wetlands Delineation Manual, regional supplements, and Corps Wetland Delineation Data Sheets: [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) and then “Wetlands and Jurisdictional Limits.”

(b) The USFWS publishes the 1988 National List of Plant Species that Occur in Wetlands ([www.nwi.fws.gov](http://www.nwi.fws.gov)).

The Natural Resources Conservation Service (NRCS) publishes the current hydric soil definition, criteria and lists: <http://soils.usda.gov/use/hydric>. For the Field Indicators for Identifying Hydric Soils in N.E., see [www.neiwpcc.org/hydricsoils.asp](http://www.neiwpcc.org/hydricsoils.asp).

### 2. GC 5: Single and Complete Project.

*Single and complete project* means the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. For example, if construction of a residential development affects several different areas of a headwater or isolated water, or several different headwaters or isolated waters, the cumulative total of all filled areas should be the basis for deciding whether or not the project will be covered by Category 1 or 2.

The *Independent utility* test is used to determine what constitutes a single and complete project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

### 3. GC 8: Threatened and Endangered Species.

(a) The following NMFS site must be referenced to ensure that listed species or critical habitat are not present in the action area [GC 8(b)] or to provide information on federally-listed species or habitat [GC 8(e)]: [www.nero.noaa.gov/prot\\_res/esp/ListE&Tspec.pdf](http://www.nero.noaa.gov/prot_res/esp/ListE&Tspec.pdf). Contact the USFWS for information to check for the presence of listed species (see Appendix D for contact information & procedures).

(b) The Endangered Species Act Consultation Handbook – Procedures for Conducting Section 7 Consultations and Conferences, defines action area as “all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. [50 CFR 402.02].”

### 4. GC 42: Essential Fish Habitat.

As part of the GP screening process, the Corps may coordinate with NMFS in accordance with the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act to protect and conserve the habitat of marine, estuarine and anadromous finfish, mollusks, and crustaceans. This habitat is termed “Essential Fish Habitat (EFH)”, and is broadly defined to include “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” There are EFH waters throughout inland and coastal waters in Maine. For additional information, see the EFH regulations 50 CFR 600 at [www.nero.noaa.gov/hcd](http://www.nero.noaa.gov/hcd) including the “Guide for EFH Descriptions” at [www.nero.noaa.gov/hcd/list.htm](http://www.nero.noaa.gov/hcd/list.htm). Additional information on the location of EFH can be obtained from NMFS (see Appendix D for contact information).

### 5. GC 4: Avoidance, Minimization and Compensatory Mitigation.

(a) See [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) and then “Mitigation” to view the April 10, 2008 “Final Compensatory Mitigation Rule” (33 CFR 332) and related documents. The Q&A document states: “In order to reduce risk and uncertainty and help ensure that the required compensation is provided, the rule establishes a preference hierarchy for mitigation options. The most preferred option

is mitigation bank credits, which are usually in place before the activity is permitted. In-lieu fee program credits are second in the preference hierarchy, because they may involve larger, more ecologically valuable compensatory mitigation projects as compared to permittee-responsible mitigation. Permittee-responsible mitigation is the third option, with three possible circumstances: (1) conducted under a watershed approach, (2) on-site and in kind, and (3) off-site/out-of-kind.

(b) Compensatory mitigation may take the form of wetland preservation, restoration, enhancement, creation, and/or in lieu fee (ILF) for inclusion into the Natural Resources Mitigation Fund for projects in DEP and LURC territories. Avoidance of wetland impacts will reduce the ILF dollar total for applicants. The ILF compensation program was established to provide applicants with a flexible compensation option over and above traditional permittee responsible compensation projects. See the Maine ILF Agreement at [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory), “Mitigation” and then “Maine,” or [www.maine.gov/dep/blwq/docstand/nrpa/ILF\\_and\\_NRCP/index.htm](http://www.maine.gov/dep/blwq/docstand/nrpa/ILF_and_NRCP/index.htm).

## **6. GCs 24, 15, and 43: Invasive Species.**

(a) Information on what are considered “invasive species” is provided in our “Compensatory Mitigation Guidance” document at [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) under “Mitigation.” The “Invasive Species” section has a reference to our “Invasive Species Control Plan (ISCP) Guidance” document, located at [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) under “Invasive Species,” which provides information on preparing an ISCP.

(b) The June 2009 “Corps of Engineers Invasive Species Policy” is at [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) under “Invasive Species” and provides policy, goals and objectives.

## **7. GC 44: Bank Stabilization.**

This generally eliminates bodies of water where the reflected wave energy may interfere with or impact on harbors, marinas, or other developed shore areas. A revetment is sloped and is typically employed to absorb the direct impact of waves more effectively than a vertical seawall. It typically has a less adverse effect on the beach in front of it, abutting properties and wildlife. See the Corps Coastal Engineering Manual [EM 1110-2-1100](http://www.nae.usace.army.mil/missions/regulatory) at [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) under “Useful Links and Documents” for design and construction guidance.

## **8. GC 45: Stream and Wetland Crossings.**

(a) Projects should be designed and constructed to ensure long-term success using the most recent manual located at [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) under “Stream and River Continuity,” currently “Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings, by the U.S. Forest Service.” Section 5.3.3 is of particular importance. Sections 7.5.2.3 Construction Methods and 8.2.11 Stream-Simulation Bed Material Placement both show important steps in the project construction.

(b) For more information on High-Quality Stream Segments and their components see:

i. High-Quality Stream Segments are shown at [www.maine.gov/dep/gis/datamaps](http://www.maine.gov/dep/gis/datamaps).

ii. Class A Waters or Class AA Waters:

[www.mainelegislature.org/legis/statutes/38/title38sec465.html](http://www.mainelegislature.org/legis/statutes/38/title38sec465.html), and

[www.mainelegislature.org/legis/statutes/38/title38sec467.html](http://www.mainelegislature.org/legis/statutes/38/title38sec467.html).

iii. Outstanding river segments [www.mainelegislature.org/legis/statutes/38/title38sec480-P.html](http://www.mainelegislature.org/legis/statutes/38/title38sec480-P.html).

(c) The Massachusetts Dam Removal and the Wetland Regulations offer guidance to evaluate the positive and negative impacts of culvert replacement, including the loss of upstream wetlands, which may be offset by the overall benefits of the river restoration. See

[www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) and then “Stream and River Continuity.”

(d) The ME DOT’s document “Waterway and Wildlife Crossing Policy and Design Guide for Aquatic Organism, Wildlife Habitat, and Hydrologic Connectivity,” 3rd Edition, July 2008, may be used as guidance to evaluate impacts to aquatic, wildlife and surface water resources when designing, constructing, repairing and maintaining stream crossings. Note: Adherence to this DOT document does not ensure compliance with this GP. Projects must comply with the requirements of this GP including GC 45 and the Corps General Stream Crossing Standards contained therein.

[www.maine.gov/mdot/environmental-office-homepage/fishpassage/3rd%20edition%20-%20merged%20final%20version%207-01-08a1.pdf](http://www.maine.gov/mdot/environmental-office-homepage/fishpassage/3rd%20edition%20-%20merged%20final%20version%207-01-08a1.pdf).

(e) GC 45(f): The Skidder Bridge Fact Sheet at [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) under “Stream and River Continuity” may be a useful temporary span construction method.

**9. GC 45: Wetland Crossings.** The Maine DEP’s crossing standards are at 06-096 DEP, Chapter 305: Permits by Rule, 9 & 10) Crossings (utility lines, pipes and cables).  
[www.maine.gov/dep/blwq/rules/NRPA/2009/305/305\\_effective\\_2009.pdf](http://www.maine.gov/dep/blwq/rules/NRPA/2009/305/305_effective_2009.pdf)

**10. GC 23: Protection of Vernal Pools.**

(a) The state’s Significant Wildlife Habitat rules ([Chapter 335](#), Section 9(C) “Habitat management standards for significant vernal pool habitat”) are located at

[www.maine.gov/dep/blwq/docstand/nrpapage.htm#rule](http://www.maine.gov/dep/blwq/docstand/nrpapage.htm#rule) under “Rules.”

(b) The following documents provide conservation recommendations:

i. Best Development Practices: Conserving pool-breeding amphibians in residential and commercial development in the northeastern U.S., Calhoun and Klemens, 2002. Chapter III, Management Goals and Recommendations, Pages 15 – 26, is particularly relevant. (Available for purchase at [www.maineaudubon.org/resource/index.shtml](http://www.maineaudubon.org/resource/index.shtml) and on Corps website\*.)

ii. Science and Conservation of Vernal Pools in Northeastern North America, Calhoun and deMaynadier, 2008. Chapter 12, Conservation Recommendations section, Page 241, is particularly relevant. (Available for purchase via the internet. Chapter 12 is available on Corps website\*.)

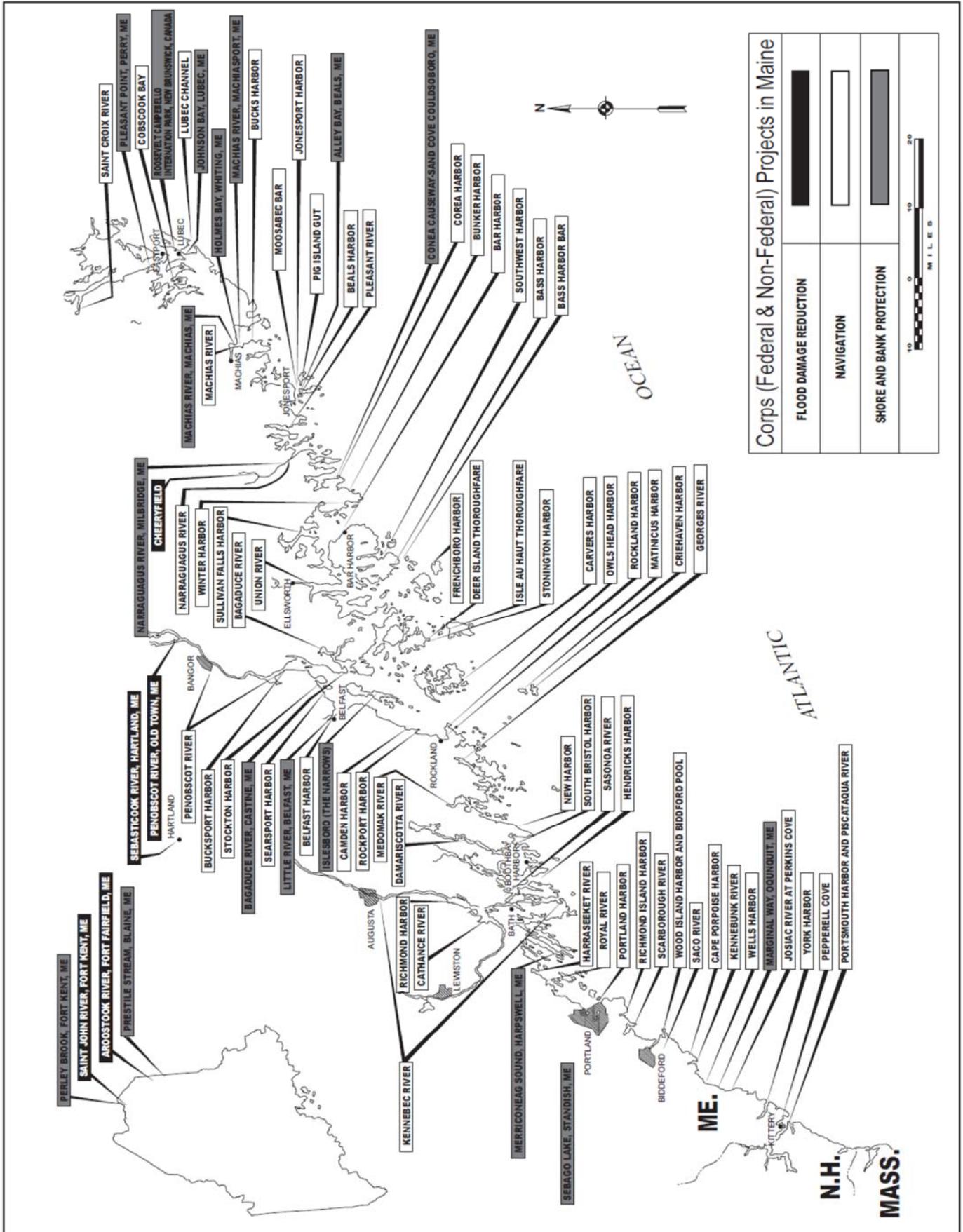
\* [www.nae.usace.army.mil/reg](http://www.nae.usace.army.mil/reg) under “Vernal Pools.”

(c) Cape Cod Curbing: For smaller roads and driveways, the most important design feature to consider is curbing. Granite curbs and some traditional curbing can act as a barrier to amphibian and hatchling turtle movements. Large numbers of salamanders have been intercepted in their migrations by curbs and catch basins. Use of Cape Cod curbs rather than traditional curbing may be one solution. Alternatively, where storm water management systems require more traditional curbing, it may be possible to design in escape ramps on either side of each catch basin. Cape Cod curbing is shown on Page 35 of the document cited in 10.b.i above. Bituminous material is not required; other materials such as granite are acceptable.

(d) The VP Directional Buffer Guidance document is located at [www.nae.usace.army.mil/missions/regulatory](http://www.nae.usace.army.mil/missions/regulatory) under: 1) “State General Permits” and then “Maine,” and 2) “Vernal Pools.”

**11. GC 29: Maintenance.** River restoration projects that are designed to accommodate the natural dynamic tendencies of the fluvial system are maintained in accordance with the project’s design objectives (Category 1) or the Corps authorization letter (Category 2). These projects are generally designed to support and implement channel assessment and management practices that recognize a stream’s natural dynamic tendencies.

# Appendix H: Federal Navigation Projects in Maine



**DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NRPA PERMIT BY RULE NOTIFICATION FORM**  
(For use with DEP Regulation, Natural Resources Protection Act-Permit by Rule Standards, Chapter 305)

PLEASE TYPE OR PRINT IN **BLACK INK ONLY**

Name of Applicant: (owner)	MaineDOT	Name of Agent:	Colin Greenan
Applicant Mailing Address:	16 State House Station	Agent Phone # (include area code):	207-590-4632
Town/City:	Augusta	PROJECT Information Name of Town/City:	Ellsworth
State and Zip code:	ME 04333	Name of Wetland or Waterbody:	Davis Brook
Daytime Phone # (include area code):	207-624-3100	Map #:	24 E1
Detailed Directions to Site:		Lot #:	
U.S. Rte. 1A - beginning on the south side of the bridge over the Union River (north of Rte. 179) and extends south 1.28 mi. to just north of Oak St. 44.557391 -68.433948			
		UTM Northing: (if known)	UTM Easting: (if known)
Description of Project:	Reconstruct and widen roadway for center turn lane, shoulder, sidewalk realign Rte. 179 intersection, replace 4'x3'x53' box culvert with a 8'x6'x89' box culvert		
Part of a larger project? (check one) →	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	After the Fact? (check one) →	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Check one → This project <input checked="" type="checkbox"/> does (or) <input type="checkbox"/> does not involve work below mean low water (average low water).			

**NRPA PERMIT BY RULE (PBR) SECTIONS: (Check at least one)**

I am filing notice of my intent to carry out work which meets the requirements for Permit By Rule (PBR) under DEP Rules, Chapter 305. I and my agents, if any, have read and will comply with all of the standards in the Sections checked below.

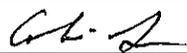
- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Sec. (2) Act. Adj. to Protected Natural Res. | <input type="checkbox"/> Sec. (10) Stream Crossing                                | <input type="checkbox"/> Sec. (17) Transfers/Permit Extension  |
| <input type="checkbox"/> Sec. (3) Intake Pipes                        | <input checked="" type="checkbox"/> Sec. (11) State Transportation Facil.         | <input type="checkbox"/> Sec. (18) Maintenance Dredging  |
| <input type="checkbox"/> Sec. (4) Replacement of Structures           | <input type="checkbox"/> Sec. (12) Restoration of Natural Areas                   | <input type="checkbox"/> Sec. (19) Activities in/on/over significant vernal pool habitat   |
| <input type="checkbox"/> Sec. (5) REPEALED                            | <input type="checkbox"/> Sec. (13) F&W Creation/Enhance/Water Quality Improvement | <input type="checkbox"/> Sec. (20) Activities located in/on/over high or moderate value inland water-fowl & wading bird habitat or shore-bird feeding & roosting areas |
| <input type="checkbox"/> Sec. (6) Movement of Rocks or Vegetation     | <input type="checkbox"/> Sec. (14) REPEALED                                       |  |
| <input type="checkbox"/> Sec. (7) Outfall Pipes                       | <input type="checkbox"/> Sec. (15) Public Boat Ramps                              |  |
| <input type="checkbox"/> Sec. (8) Shoreline stabilization             | <input type="checkbox"/> Sec. (16) Coastal Sand Dune Projects                     |  |
| <input type="checkbox"/> Sec. (9) Utility Crossing                    |   |  |

**NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS:**

- Attach** a check for the correct fee, payable to: "Treasurer, State of Maine". The current fee for NRPA PBR Notifications can be found at the Department's website: <http://www.maine.gov/dep/feesched.pdf>
- Attach** a U.S.G.S. topo map or Maine Atlas & Gazetteer map with the project site clearly marked.
- Attach** Proof of Legal Name if applicant is a corporation, LLC, or other legal entity. Provide a copy of Secretary of State's registration information (available at <http://icrs.informe.org/nei-sos-icrs/ICRS?MainPage=x>). Individuals and municipalities are not required to provide any proof of identity.
- Attach** photos of the proposed site where activity will take place as required in PBR Sections checked above.
- Attach** all other required submissions as outlined in the PBR Sections checked above.

I authorize staff of the Departments of Environmental Protection, Inland Fisheries & Wildlife, and Marine Resources to access the project site for the purpose of determining compliance with the rules. I also understand that **this permit is not valid until approved by the Department or 14 days after receipt by the Department, whichever is less.**

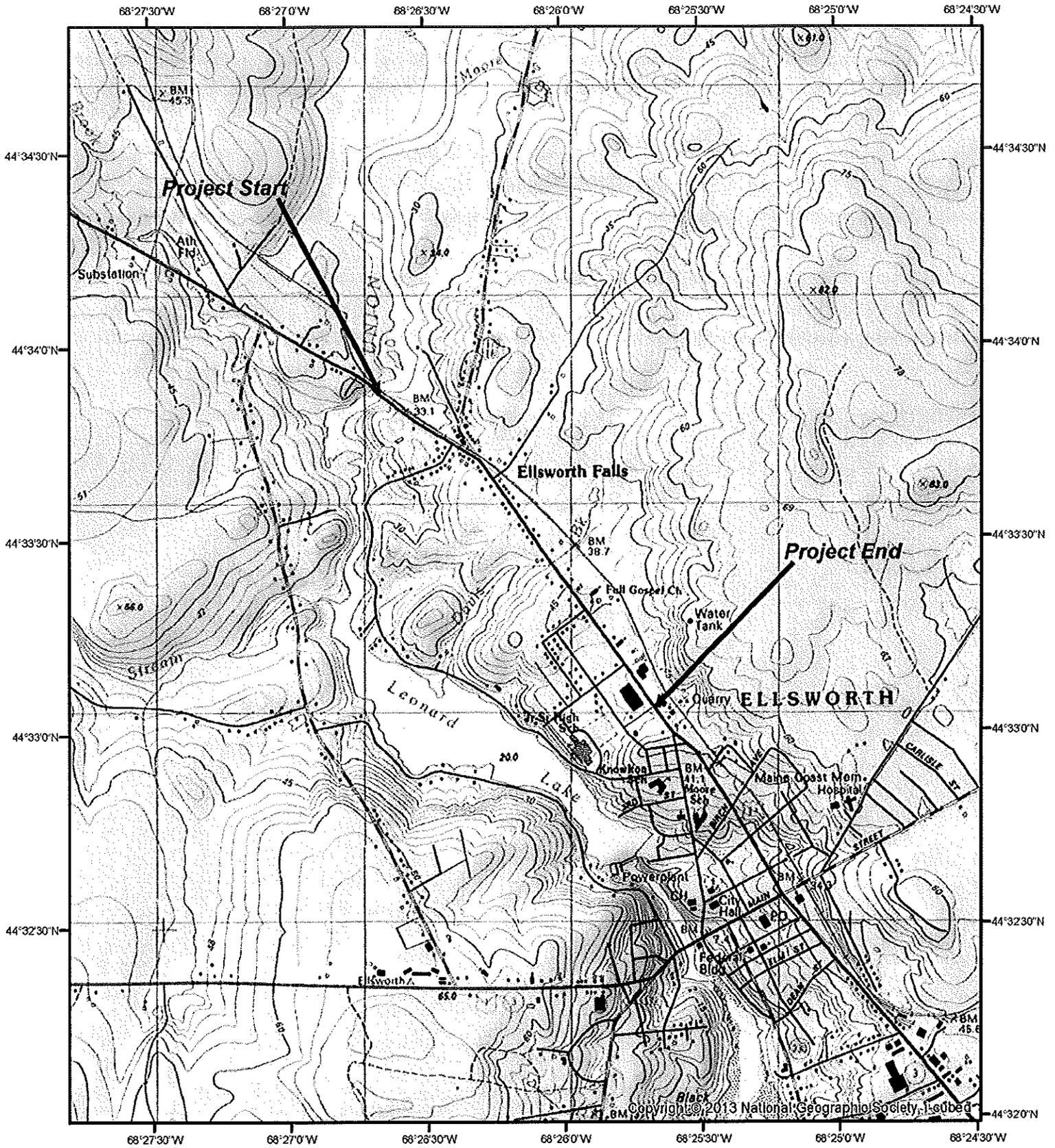
By signing this Notification Form, I represent that the project meets all applicability requirements and standards in the rule and that the applicant has sufficient title, right, or interest in the property where the activity takes place.

Signature of Agent or Applicant:		Date:	2/1/16
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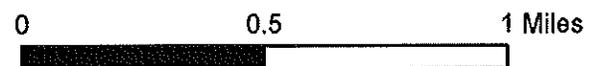
*Keep a copy as a record of permit.* Send the form with attachments via certified mail or hand deliver to the Maine Dept. of Environmental Protection at the appropriate regional office listed below. The DEP will send a copy to the Town Office as evidence of the DEP's receipt of notification. No further authorization by DEP will be issued after receipt of notice. Permits are valid for two years. **Work carried out in violation of any standard is subject to enforcement action.**

- |  |   |   |   |
|--|---|---|---|
| AUGUSTA DEP<br>17 STATE HOUSE STATION<br>AUGUSTA, ME 04333-0017<br>(207)287-3901 | PORTLAND DEP<br>312 CANCO ROAD<br>PORTLAND, ME 04103<br>(207)822-6300 | BANGOR DEP<br>106 HOGAN ROAD<br>BANGOR, ME 04401<br>(207)941-4570 | PRESQUE ISLE DEP<br>1235 CENTRAL DRIVE<br>PRESQUE ISLE, ME 04769<br>(207)764-0477 |
|--|---|---|---|

OFFICE USE ONLY	Ck.#	Date	Staff	Staff	
PBR #	FP		Acc. Date	Def. Date	After Photos



U.S. Route 1A and Route 179  
 WIN# 19196.00  
 Ellsworth, Maine  
 44.557391 -68.433948



## 11. State transportation facilities

### A. Applicability

- (1) This section applies to the maintenance, repair, reconstruction, rehabilitation, replacement or minor construction of a State Transportation Facility carried out by, or under the authority of, the Maine Department of Transportation (MaineDOT) or the Maine Turnpike Authority, including any testing or preconstruction engineering, and associated technical support services.
- (2) This section does not apply to an activity within a coastal sand dune system.

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NOTE: The construction of a transportation facility other than roads and associated facilities may be subject to the Storm Water Management Law, 38 M.R.S.A. Section 420-D.

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### B. Standards

- (1) Photographs of the area to be altered by the activity must be taken before work on the site begins. The photographs must be kept on file and be made available at the request of the DEP.
- (2) The activity must be reviewed by the Department of Inland Fisheries and Wildlife and the Department of Marine Resources, as applicable. The applicant must coordinate with the reviewing agencies and incorporate any recommendations from those agencies into the performance of the activity.
- (3) All construction activities undertaken must be detailed in a site-specific Soil Erosion and Water Pollution Control Plan and conducted in accordance with MaineDOT's Best Management Practices for Erosion and Sediment Control, dated January 2000, and Standard Specifications, dated December 2002.
- (4) Alignment changes may not exceed a distance of 200 feet between the old and new center lines in any natural resource.
- (5) The activity may not alter more than 300 feet of shoreline (both shores added together) within a mile stretch of any river, stream or brook, including any bridge width or length of culvert.
- (6) The activity may not alter more than 150 feet of shoreline (both shores added together) within a mile stretch of any outstanding river segment identified in 38 M.R.S.A. 480-P, including any bridge width or length of culvert.
- (7) The activity must minimize wetland intrusion. The activity is exempt from the provisions of Chapter 310, the Wetland and Waterbodies Protection Rules, if the activity alters less than 15,000 square feet of natural resources per mile of roadway (centerline measurement) provided that the following impacts are not exceeded within the 15,000 square foot area:
  - (a) 1,000 square feet of coastal wetland consisting of salt tolerant vegetation or shellfish habitat; or

(b) 5,000 square feet of coastal wetland not containing salt tolerant vegetation or shellfish habitat; or

(c) 1,000 square feet of a great pond.

All other activities must be performed in compliance with all sections of Chapter 310, the Wetland Protection Rules, except 310.2(C), 5(A), 9(A), 9(B) and 9(C).

- (8) The activity may not permanently block any fish passage in any watercourse containing fish. The applicant must coordinate with the reviewing agencies listed in paragraph 2 above to improve fish passage and incorporate any recommendations from those agencies into the performance of the activity.

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NOTE: For guidance on meeting the design objectives for fish passage, including peak flow, maximum velocity, mining depth and gradient, see the MaineDOT Waterbody and Wildlife Crossing Policy and Design Guide (July 2008), developed in conjunction with state and federal resource and regulatory agencies.

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- (9) Rocks may not be removed from below the normal high water line of any coastal wetland, freshwater wetland, great pond, river, stream or brook except to the minimum extent necessary for completion of work within the limits of construction.
- (10) If work is performed in a river, stream or brook that is less than three feet deep at the time and location of the activity, the applicant must isolate the work area from the resource and divert stream flows around the work area, maintaining downstream flows while work is in progress.
- (11) Wheeled or tracked equipment may not operate in the water. Equipment operating on the shore may reach into the water with a bucket or similar extension. Equipment may cross streams on rock, gravel or ledge bottom. If avoiding the operation of wheeled or tracked equipment in the water is not possible, the applicant must explain the need to operate in the water. Approval from the DEP to operate in the water must be in writing, and any recommendations from the DEP must be incorporated into the performance of the activity.
- (12) All wheeled or tracked equipment that must travel or work in a vegetated wetland area must travel and work on mats or platforms.
- (13) Any debris or excavated material must be stockpiled either outside the wetland or on mats or platforms. Erosion and sediment control best management practices must be used, where necessary, to prevent sedimentation. Any debris generated during the activity must be prevented from washing downstream and must be removed from the wetland or water body. Disposal of debris must be in conformance with the Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S.A. Section 1301 *et seq.*
- (14) Work below the normal high water line of a great pond, river, stream or brook must be done at low water except for emergency work or work agreed to by the resource agencies listed in paragraph 2 above.
- (15) Perimeter controls must be installed before the work starts. Disturbance of natural resources beyond the construction limits shown on the plans is not allowed under this rule.

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NOTE: Guidance on the location of construction limits can be obtained from the on site Construction Manager.

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- (16) The use of untreated lumber is preferred. Lumber pressure treated with chromated copper arsenate (CCA) may be used only if necessary and only if use is allowed under federal law and not prohibited from sale under 38 M.R.S.A. 1682, and provided it is cured on dry land in a manner that exposes all surfaces to the air for a period of at least 21 days prior to construction. Wood treated with creosote or pentachlorophenol may not be used where it will contact water.
- (17) A temporary road for equipment access must be constructed of crushed stone, blasted ledge, or similar materials that will not cause sedimentation or restrict fish passage. Such roads must be completely removed at the completion of the activity. In addition, any such temporary roads which are in rivers, streams or brooks, must allow for a passage of stormwater flows associated with a 10-year storm.
- (18) Non-native species may not be planted in restored areas.
- (19) Disposal of debris must be in conformance with Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S.A. Sections 1301 *et seq.*
- (20) Disturbance of vegetation must be avoided, if possible. Where vegetation is disturbed outside of the area covered by any road or structure construction, it must be reestablished immediately upon completion of the activity and must be maintained.
- (21) A vegetated area at least 25 feet wide must be established and maintained between any new stormwater outfall structure and the high water line of any open water body. A velocity reducing structure must be constructed at the outlet of the stormwater outfall that will create sheet flow of stormwater, and prevent erosion of soil within the vegetated buffer. If the 25 foot vegetated buffer is not practicable, the applicant must explain the reason for a lesser setback in writing. Approval from the DEP must be in writing and any recommendations must be incorporated into the activity.

**C. Definitions.** The following terms, as used in this chapter, have the following meanings, unless the context indicates otherwise:

- (1) Diversion. The rerouting of a river, stream or brook around a construction site and then back to the downstream channel.
- (2) Fill. a. (verb) To put into or upon, supply to, or allow to enter a water body or wetland any earth, rock, gravel, sand, silt, clay, peat, or debris; b. (noun) Material, other than structures, placed in or immediately adjacent to a wetland or water body.
- (3) Floodplain wetlands. Freshwater wetlands that are inundated with flood water during a 100-year flood event based on flood insurance maps produced by the Federal Emergency Agency or other site specific information.
- (4) Riprap. Heavy, irregularly shaped rocks that are fit into place, without mortar, on a slope as defined in the MaineDOT Standard Specifications, dated **November 2014**.